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ABSTRACT

During the 1994-95 academic year, faculty and administrators in the College of Education at Illinois State University (ISU) (Normal, Illinois) along with teachers and administrators from the Community Consolidated School District 21 (Wheeling, Illinois) began discussions to establish a Professional Development School (PDS). In August 1995, 32 ISU elementary education majors were placed at school sites where they would receive their final education courses and participate in day-to-day classroom activities under the direction of a mentor teacher. A study was undertaken to gauge the effect of the PDS program on the various participant groups. PDS participants were compared against traditional teacher education program participants on a 150-item questionnaire covering 8 areas of teaching and teacher preparation and on an open-ended questionnaire. Results from these data found that the PDS effort was generally successful in inculcating the ISU students into the profession of teaching. Although student and mentor opinions were generally similar, some statistically significant differences suggested that elements of this PDS program had a positive influence in the perceptions of students and mentor teachers. The study also raised some critical issues for future consideration. These include the problems of distance and traveling time between the university and the participating district, ways to improve communication, student and faculty workloads, and ways to provide similar experiences for on-campus students. Seventeen tables of survey data and the questionnaire are appended. (Contains 37 references.) (JLS)

ED 404 306

Professional Development School 1995-96

A Collaboration
of the
College of Education at Illinois State University
and the
Community Consolidated School District #21
Wheeling, Illinois

A Research Report

conducted by

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Executive Summary

This recorded history of how students have been prepared to become teachers dates back several centuries. A number of different approaches have been used, and re-used, as the needs of the country and the perceptions what makes the best method have evolved over time. One of the new movements has been forwarded by the Holmes Group, a collection of universities all involved in the preparation of new teachers. Called a Professional Development School, or PDS, this viewpoint supports a collaboration among university faculty and practicing teachers. In brief, the PDS model advocates that students pursuing a career in teaching would in school-based experiences conducted by both university faculty and district mentors teachers, experiences designed to expose the student to what the teaching life is really all about. University faculty would benefit from direct and ongoing interactions with real teachers and students, while the practicing teachers could learn about and experiment with the latest theories and methods. During the 1994-1995 academic year faculty and administrators in the College of Education at Illinois State University (Normal, IL), and teachers and administrators from the Community Consolidated School District #21 (Wheeling, IL), began discussions to establish a PDS. In August of that year 32 of ISU's elementary education majors were placed at school sites in District #21 to spend their entire last year of education and practice. During this year those students received their final courses taught on-site in the district by selected ISU faculty. These students also participated in the day-to-day activities of the classroom under the direction of selected mentor teachers. By comparison, students participating in the regular campus-based teacher preparation program took their final courses on-campus during that Fall semester, then participated in student-teaching experiences in participating districts during that Spring semester. A research study was designed and implemented to gauge the effect of the PDS program on the participating students, ISU faculty, and district teachers. PDS participants were compared against traditional program participants on a 150-item questionnaire covering eight different areas of teaching and teacher preparation and on an open-ended survey having several more general questions. PDS participants were also interviewed individually and in small groups, and observed on-site in the district. Results from these data found that, while there were important issues yet to be addressed in the implementation of the PDS effort, it was successful at inculcating the ISU students into the profession of teaching. Student and district mentor opinions on the 150-item questionnaire were, for the most part, similar among the PDS participants and the participants in the traditional program. Several statistically significant differences are suggestive that elements of this PDS program have made a positive, important influence in the perceptions of the participating students and mentor teachers. University faculty likewise report satisfaction with the students and the program although, if the effort is to continue and prosper in future years, several critical issues must be addressed. These issues include: the distance and traveling time between the university and the participating district; ways to improve and increase the amount of communication between university faculty, students, and district mentors; the student and faculty workload, and ways this load might be more equitably distributed and scheduled; and ways of providing similar experiences to other on-campus students. How well the PDS student fare after graduation, in comparison to their traditional program classmates, is one question that remains to be answered. Overall, this first year effort has successfully demonstrated the utility of such a university-district collaboration, and is worthy of continued interest and investment by all participating parties.

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A Brief Review of the Literature

The History of Practice Teaching

The documented roots of practice teaching go back to the 15th century when William Bingham required that his student schoolmasters prepare lesson plans that were evaluated by the headmaster (Armytage, 1951). On March 11, 1823, America's system of teacher education was originated when Rev. Samuel Hall established the first normal school in Concord, VT, as an adjunct to his ministerial duties. In their third term students were typically required to take a course titled the "Art of Teaching" and participate in observation and practice teaching in local rural schools during the winter months. Following Hall's idea, Horace Mann established a Model School as part of a normal school in the mid-1800's. The model school was a specific school where pre-service teachers observed teachers and children and practice taught.

Education, as a profession of applied science which would require the study of theories, research and philosophy, was conceptualized in the modern age by John Dewey. Dewey believed that a laboratory model, similar to that used in other sciences, was necessary. He believed an exemplary school could be set up to provide a place where teachers and students could experiment and practice, a place that was not subject to all the imperfections of a normal classrooms. Dewey established his first laboratory school at the University of Chicago in the late 1800's. The concept grew, and between the 1920's and 1940's was the considered the best method for developing theory and training new teachers (Lange, 1993).

The end of World War Two saw an explosion in population of the United States. This growth, coupled with the educational benefits of the G.I. Bill, occasioned a great increase in the number of people attending college and, with it, the number of students preparing to become teachers. As more people became interested in this area of study different ideas developed regarding the best way to prepare these new professionals. Beginning in the 1950's, waves of reform began hitting the educational beach about every ten years. As these movements are reviews it helps to bear in mind a strict definition of the word reform: namely, "to form again", not necessarily from scratch.

The first of these, and one of the most public of, reforms was virtually demanded when education was blamed for America falling behind the Soviets in the space race. At that time Congress passed the National Defense Education Act. The changes of the 1950's, led in large part by Arthur Bestor, impacted teacher preparation in three distinct ways:

1. Upgrading the image of the teaching profession;
2. Attracting higher quality individuals into teaching; and
3. Ensuring that all teachers receive a solid basic education in the liberal arts and sciences (Klausmeier, 1990).

The decade of the 1960's saw the advent of a more humanistic approach to teacher education. Legislation such as the Elementary and Secondary Education Act of 1965, and the Education Professionals Development Act of 1968, emphasized performance based teaching and learning,

setting the trend for idealism (Bauer, 1991). Important reformers of that era were James Conant and James Koerner. They emphasized a solid grounding in the liberal arts with much less emphasis on the technical aspects of training teachers (Klausmeier, 1990).

Over the years, laboratory schools had become more of a place for student teachers to practice than as the research center that Dewey had envisioned. As the numbers of student teachers increased a matching decline in the numbers of laboratory schools was seen as program after program were phased out. The laboratory schools were replaced by Portal Schools, real schools which were to serve as placement sites for student teachers, as research sites for university faculty, and as practical sites for assessing new methods and curricula (Winitzky, Stoddart and O'Keefe, 1992). These real schools were supposed to be a collaborative of teachers and administrators from the public schools, university administration, college faculty, the community and teachers' unions who together would plan, develop, implement and evaluate programs. They were also supposed to be realistic settings where current teachers, future teachers and university faculty could examine and perfect their teaching abilities (Lange, 1993).

Prominent names in the reform of the 1970's were Robert Howsam, Nathaniel L. Gage and Robert Houston. In the national atmosphere that encouraged Title IX (of PL. 94-142), and sustained efforts towards improving human rights, these reformers advocated developing the themes from the 1950's and 1960's through additional emphasis on teacher education. Gage advanced the idea of Teacher Centers for teacher preparation -- places where teachers could get together with other teachers, university professors and others to interact and to help them become better teachers (Klausmeier, 1990). The exact nature of these centers varied widely but generally had the following components:

1. Clustering of students in a school, or group of schools, in a school district;
2. A reliable supply of pre-service students that schools could count on;
3. A formal governance structure that provided better communication between the school and the university; and
4. Opportunities to provide in-service activities for cooperating teachers (MacNaughton and Johns, 1993).

Triads were another style of field experience seen during the late 1960's and into the early 1970's. In these programs school teachers served occasionally in the teacher training process with local schools provided a site for pre-service students to gain experience. The classroom teacher would advise the university faculty regarding the program and evaluation of the student teacher, but the final authority lay with the university (McNaughton and Johns, 1993). This model lay the foundation for a system that, in many places throughout the country, continues to today.

Once again in the 1980's, due to a perceived failure of the United States in the international forum, education was challenged to reform to improve America's abilities, this time in the world-wide economic race. This wave of reform was led by many renowned commissions. One of the most notable was the report titled "A Nation at Risk: The Imperative of Educational Reform". This report found that the decline in educational performance of American students was due, in a

large part, to inadequacies in the content, expectations, time and methods of teaching used in the educational process. Specific recommendations were made that addressed each of these shortcomings. The authors of this report expressed a belief that the solution to America's problems lay in a commitment to life-long learning. This report was a ground stone of change, and would initiate a decade of educational reform in three directions:

1. School curriculum;
2. School restructuring; and
3. Reconstruction of teacher education (Lange, 1993).

Along with these calls for reform came multiple versions of Partnership Schools. As early as 1983 Elsie Gee proposed Teacher Education Academies. These academies would provide in-service staff development, sites for pre-service teacher education, student teaching, collegiality, and research. In some cases the academy staff would also be employed as university instructors (Brainerd, 1989).

Also in 1983 a group of 17 deans from prominent colleges of education met to discuss alternative ways to enhance the programs at their institutions. They came to be known as the Holmes Group and in 1986 they produced Tomorrow's Teachers. Among the recommendations of Holmes Group was a new kind of teacher training facility for which they coined the name Professional Development School (PDS). A PDS, according to the Holmes Group, would provide superior opportunities for teachers and administrators to influence the development of their profession, and for university faculty to increase the professional relevance of their work, through:

1. Mutual deliberation on problems with student learning and their possible solutions;
2. Shared teaching in the university and schools;
3. Collaborative research on the problems of educational practice; and
4. Cooperative supervision of prospective teachers and administrators (Holmes Group, 1986).

With this development the Holmes Group committed itself to changing both the structure of teacher education and the working conditions within public schools. Shortly thereafter the Carnegie Forum on Education of the Economy on Teaching as a Profession called for Clinical Schools, with recommendations very similar to those of the Holmes Group. These clinical schools were seen as analogous to teaching hospitals -- they would be outstanding public schools which worked closely with schools of education, would provide experience for pre-service teachers and would support inquiry, innovation and research in education.

Brainerd (1989) reports on a 1987 Rand Corporation monograph which proposed an Induction School. An induction school was described as a difficult inner city or rural school whose main priority would be the induction of novice, or first year, teachers into the profession. Unlike other preparatory institution the induction school has several special implications for the training of pre-service teachers:

1. An excellent way to learn from expert teachers;
2. The opportunity to work with school and university faculty to develop and hone their skills;
3. Gain broader experience with a diverse population; and
4. Learn how to make judgments and decisions with regard to what and how students are to be taught.

School reform of the 1980's featured accountability and improvement plans in which the decisions were made at the top and passed down to the ranks. The wave of the 1990's, at least to this point in time, evidences a change in philosophy of management similar to that in business; namely, work from the bottom up. The concept is relatively simple -- the people who are being affected the most by a process must claim ownership of that process and of any change in order for the change to be true and effective. In the case of schools the teachers themselves must become involved in the development of their profession and decisions about the methods of learning, not only for their students but for themselves (Zeichner, 1992).

One of the first movements in this decade is the Goals 2000: Educate America Act. This 1990 act authorized a range of initiatives for Federal support of education reform. It established eight national goals to be achieved by the year 2000, among which was a call for bottom-up reform, model or lighthouse schools, and professional development for the teaching force. In 1990 the Holmes Group published Tomorrow's Schools, Principles for the Design of Professional Development Schools. "By Professional Development School we do not mean just a lab school for university research, nor a demonstration school, nor a clinical setting for preparing student teachers and intern teachers. We mean all of these together: a school for the development of notice professionals for continuing development of experienced professionals and for the research and development of teaching professionals" (Holmes Group, 1990). According to the Holmes Group these schools can help the teaching profession in six different ways:

1. By promoting much more ambitious conceptions of teaching and learning on the part of prospective teachers in universities and students in schools;
2. By adding to and reorganizing the collections of knowledge we have about teaching and learning;
3. By ensuring that enterprising, relevant, responsible research and development is done in schools;
4. By linking experienced teachers' efforts to renew their knowledge and advance their status with efforts to improve their schools and to prepare new teachers;
5. By creating incentives for the faculty of public schools and universities to work together; and
6. By strengthening the relationship between schools and their communities.

Professional Development Schools: The Holmes Group Model

What, then, is a professional development school? Generally as one reads extensively about a given topic the differences begin to fall away and a central theme becomes clear. However, in the

case of a PDS, there exists only general principles rather than specific, concrete steps. This is, in fact, by intention, for the Holmes Group stated that they did not have a specific blueprint and that they did not expect any two universities to develop identical programs (Holmes Group, 1986). However, the Holmes Group expressed dismay because their concept of a PDS had attracted many cheap copies and all kinds of schools were calling themselves a PDS when, in fact, they shared none of the essential elements defined by the Holmes Group. Often these professional development schools were nothing more than a very traditional student teaching model with perhaps one or two different little twists (Holmes Group, 1995).

In their model the Holmes Group (1986) set forth five general goals. Three of these goals address aspects of their concept central to the establishment of a PDS:

1. To recognize differences in teachers' knowledge, skill, and commitment in their education, certification and work. If teachers are to become more effective professionals, we must distinguish between novices, competent members of the profession, and high-level professional leaders.
2. To connect our own institutions to schools. If university faculties are to become more expert educators of teachers they must make better use of expert teachers in the education of other teachers, and in research on teaching. In addition, schools must become places where both teachers and university faculty can systematically inquire into practice and improve it.
3. To make schools better places for teachers to work and to learn. This will require less bureaucracy, more professional autonomy, and more leadership for teachers. But schools where teachers can learn from each other, and from other professionals, will be schools where good teachers will want to work. They also will be schools in which students will learn more.

The Holmes Group suggests that a PDS should be the analogue of the medical education's teaching hospital, an institution that brings practicing teachers and administrators together with university faculty to improve teaching and learning. In this way teachers and administrators can influence the development of the profession and university faculty can develop the professional relevance of their work by:

1. Mutually discussing the problems and possible solutions involved with student learning;
2. Sharing teaching in the schools and universities;
3. Collaborating on educational research; and
4. Cooperating in the supervision of prospective teachers and administrators.

To work as a part of a professional development school model the Holmes Group felt that a cooperating, or mentor, teacher should have achieved the level of Career Professional Teacher. This would be accomplished through three levels of teacher licensing: Instructor, Professional Teacher and Career Professional Teacher. The career professional teachers were individuals who had:

1. Passed examinations in their subject areas, reading, writing and pedagogy;
2. Demonstrated competence as a teacher of academic subjects;
3. Completed a master's degree in teaching which included:
   a. Study in the candidates's major or minor academic field,
   b. Studies of pedagogy and human learning,
   c. Work in classrooms with children who were at risk, and
   d. A full year of supervised teaching;
4. Extensive experience at the second level of professional teacher, with an outstanding record; and
5. Further specialized study, ordinarily for the doctorate.

The Holmes Group felt that such qualified persons should be rewarded for both their achievements and their participation. University teaching appointments, and reimbursement for their contribution to the pre-service teacher training program, were several of the rewards that a university-school collaboration could consider.

In addition, a PDS would be an collaboration that:

1. Maintains an open-minded, experimental attitude;
2. Is constantly seeking ways to increase their instructional effectiveness with diverse groups of at-risk students; and
3. Is willing to become a demonstration site where recent scholarship can be reviewed and incorporated into the operating policy and practice.

This would fit into the overall purpose of the professional development school, namely to:

1. Be models of exemplary practice which can be developed, codified and implemented as a part of professional knowledge;
2. Be models of promising and productive structural relations among all levels of educators and means of improving opportunities and responsibilities to attract and retain competent, dedicated teacher; and
3. Bring practicing teachers and administrators together with university faculty in partnerships that promote the following principles:
   a. Reciprocity between research and practice;
   b. Experimentation with new forms of practice and structure;
   c. Careful study and validation of new ideas; and
   d. commitment to the development of teaching strategies for a broad range of children with different backgrounds, abilities and learning styles.

In Tomorrow's Schools the Holmes Group (1990) reiterated their belief that professional development schools are an essential means to effective educational reform. The group offered six principles for the development of a PDS:

1. Teaching and learning for understanding.

All the school's students participate seriously in the kind of learning that allows you to go on learning for a lifetime. This may well require a radical revision of the school's curriculum and instruction.

2. Creating a learning community.
   The ambitious kind of teaching and learning we hope for will take place in a sustained way for large numbers of children only if classrooms and schools are thoughtfully organized as communities of learning.
3. Teaching and learning for understanding for everybody's children.
   A major commitment of the Professional Development School will be overcoming the educational and social barriers raised by an unequal society.
4. Continuing learning by teachers, teacher educators, and administrators.
   In the Professional Development School, adults are expected to go on learning, too.
5. Thoughtful long-term inquiry into teaching and learning.
   This is essential to the professional lives of teachers, administrators, and teacher educators. The Professional Development School faculty, working as partners, will promote reflection and research on practice as a central aspect of the school.
6. Inventing a new institution.
   The foregoing principles call for such profound changes that the Professional Development School will need to devise for itself a different kind of organizational structure, supported over time by enduring alliances of all institutions with a stake in better professional preparation for school faculty.

The Holmes Group did not expect that any one school could implement these principles in one fell swoop. Instead they expect it to be a process of what they describe as "small tries with cumulative effects over time" (p. 85). They suggest that the process begin with a group of school and university faculty setting up a schedule of regular meetings, classroom observations and workshops to discuss and interpret, for their situation, the implications of these principles, attacking only one or two at a time. The group understands that many questions can only be answered by experience, but at the same time believes it is essential to open up conversations between and among local, regional and national networks to get people sharing their activities.

The concept of a PDS will only succeed if there is true reciprocity between the school and the university educators. That process of reciprocity can be initiated by any interested party: an individual school, a school district, a university or another party. The Holmes Group stressed the fact that a PDS should not simply formalize existing arrangements wherein schools regularly accept student teachers, take part in university research projects, and serve as instructional testing sites. A PDS is supposed to be a learning community composed of a both the university and the school, committed to a long-term relationship. They propose that the coalition surrounding a PDS be composed of business policymakers, community organizations, and social service agencies.

Setting up a PDS may involve conflicts with existing laws, regulations and contracts. The Holmes Group suggests initially dealing with these through rule-by-rule waivers. A more progressive approach would be to have the PDS declared what the Holmes Group termed a "regulatory free zone", in which all but the elemental guarantees of health, safety, due process and

civil rights are suspended and the school is free to create its own. This requires a serious commitment on the part of the school and university faculty to develop broad-based support and maintain a responsibility to the public. [Note: the Charter Schools movement has this same approach to dealing with existing laws and regulations, although the format of the resulting school may not necessarily be a PDS-like collaboration between a school and a university.]

The Holmes Group is fully aware that a PDS will require additional funding for planning, staff development, new technology, capital improvements and operating costs and, perhaps, additional teachers. They acknowledge that it is doubtful any school or university would be willing, or able, to finance the entire budget. Suggestions are made to examine state and business funding sources in addition to philanthropic organizations. Ultimately, however, the burden of covering the cost of initial outlays will have to be borne by the educators involved.

Another point of consideration by the Holmes Group was whether parents and teachers ought to have any choice concerning their involvement. Although a strong argument can be made that the persons involved work best, and achieve the most, when allowed to make such a choice on their own there is an opposing view that many might choose not to participate simply from lack of knowledge or inappropriately formed opinions about the project. For these reasons the Holmes Group advises that a school and university considering forming a PDS that might wish to offer choice do so on an experimental basis, reviewing its decision at appropriate points in the future.

To promote the PDS model as a long-term force in the improvement of teaching and learning, to avoid burnout, and to encourage and sustain enthusiasm, excellence and energy among educators, the Holmes Group calls for:

1. Innovation and flexibility in the teacher's job definitions;
2. New ways of organizing and allocating responsibility among teachers, administrators and university educators;
3. New ways of allocating budgets and new sources of funds;
4. More efficient use of existing resources, including administrative overhead, to support instructions;
5. More time for reflective professional conversation;
6. New formats for assessing students and evaluating teachers; and
7. Encouragement, resources, and collaboration with school and university colleagues to think through, work out, test and revise teachers' own best ideas about teaching and to solve their most frustrating problems.

A commonly asked question is how to provide a PDS experience for all students in a university's college of education. The Holmes Group does not propose this as an immediate possibility but rather as a long-range goal. Neither does the group address the question of selection of those pre-service teachers who would participate in the first PDS attempts.

In the Holmes Group most recent publication, Tomorrow's Schools of Education, the group states that while a PDS is analogous to teaching hospitals and experimental stations in agriculture,

it is meant to do more than these examples -- it is meant to be about continuous innovation. Although no two PDS implementations should look exactly alike, they should possess certain common characteristics, among which is a dynamism that is constantly evolving. The PDS is central, according to the Holmes Group, to the three basic commitments of tomorrow's schools of education:

1. Professional learning in the context of sound practice;
2. Improvement-oriented inquiry; and
3. Educational standard-setting.

Professional learning in the context of sound practice means that a student should observe, be guided by, and participate in discussions with a cross-section of excellent practitioners in the building, not just those from the participating school of education. Improvement oriented inquiry calls for habits of reflecting, questioning, experimenting and evaluating ways of teaching by one's self and with colleagues. This also involves systematic research and development aimed at generating and applying new knowledge by both the school and the university faculty. In the PDS this would be a collaborative activity, combining the theoretical research of the university faculty with the practical knowledge of the classroom teacher. While understanding that the cultures of public schools and schools of education often clash, the Holmes Group related that the results of one of their surveys indicated the faculty of schools of education believed they should:

1. Integrate faculty from schools, school districts and other educational settings into the research and development activities of the school of education;
2. Create opportunities for faculty research in a variety of field settings affiliated with the school of education; and
3. Create opportunities for faculty research in collaboration with field-based practitioners.

The Holmes Group believes that the PDS should become a central resource to the standard setting movement and contribute through:

1. Serving as central locations for accumulating the various factors and developing structure;
2. Serving as a location to gain expertise about how assessment can contribute to learning as well as measure learning and in turn share that knowledge; and
3. Serve as an administrator of assessment that is in the best interests of teaching and learning.

What has been learned about professional development school since the idea's first inception? What are the main difficulties that remain to be overcome? While these questions are still being measured at several sites across the nation the Holmes Group has provided the following recommendations to schools and universities considering establishing a PDS:

1. Concentrate initially on just one PDS site.

This will ensure, as much is possible, a successful experience while avoiding spreading resources too thin. The Holmes Group suggests that a good first site might be a school with which the university has a tradition of collaboration. A history of trust and shared work would serve as a nurturing atmosphere for the growth of the new PDS.

2. Develop standards and goals to ensure that the PDS is what its name implies.
   These standards will, of necessity, change and evolve as the PDS matures. They must, however, be a collaborate effort on the part of the university and the school from the very beginning. Typical standards should document the number of school and university faculty to work regularly with the PDS, the budget, the number of student placements and the review and change process. The National Center for Restructuring Education, Schools and Teaching and the National Council for the Accreditation of Teacher Education have begun forming standards for educational professionals in a PDS which can be used for guidance.
3. The PDS should be considered an integral part tomorrow's school of education, not just a passing phase.
   Although the Holmes Group advises beginning small, they advocate developing a mission statement that demonstrates its incorporation into the very core of the university's school of education program, with the eventual goal that learning experiences for most students would occur within a PDS.

The ISU-District #21 Professional Development School Project

Overview of the 1995-1996 Effort

The College of Education at Illinois State University is one of the most prolific producers of new teacher candidates within the state. Each year between one-sixth and one-ninth of the new teachers entering the job market graduate from an Illinois State University teacher preparation program. This number of students means that, during any semester, hundreds of students are placed for clinical and student-teaching experiences. Since the beginning of this decade the numbers have been steadily growing, placing an enormous pressure on the resources of the university and local cooperating school districts. Changes in all phases of the curriculum and most of all in the final year of student teaching experiences, would be needed if all of these students were to progress in a timely fashion from their first inception into the Illinois State University program, through regular course work, in supervised field experiences then into the job market.

Educators at the university are cognizant of the growing national trend to examine alternative models teacher preparation. The regular program at Illinois State is a good experience, heavily grounded in the traditional theories and practices developed in the 1960's and 1970's. Faculty and administrators quickly recognized the benefits that could be gained from exploring newer and different models, specifically that of a professional development school.

Over the years the university has established good, working relationships with a number of school districts. Many of these are districts close to the university, coming from predominantly rural areas of the state with lower population densities and smaller numbers of pre-service teacher

placements. Several schools, however, are in the more populated regions including Chicago, St. Louis, and Peoria. One of these, Community Consolidated School District #21, is one of the largest elementary districts in the state. Located a few miles north of Chicago's O'Hare airport in Wheeling, Illinois, District #21 is a community of diverse people, languages and cultures. Larger numbers of elementary education majors had, over the years, engaged in their student-teaching experiences at District #21, and there was a good relationship between the school district administrators and teachers and the university. If any district-university collaboration was likely to work well, the faculty reasoned, it would be between the university and this district.

During the 1994-1995 school year contact was made, and preliminary planning meetings were held, between officials of the university and the district. A steering committee consisting of district administrators and teachers, and university administrators and faculty, was established. This group met several times throughout the year, together as a combined group and separately within just the district and the university. Discussions ranges from the mostly theoretical ("What do we want our PDS to look like?") to the mostly practical ("How should we schedule the students' day-to-day experiences?").

By March of 1995 the steering committee had made significant progress in its planning. The general framework called for the ISU-District #21 PDS project to begin in August, 1995 and to continue through the 1995-1996 academic year. A cohort of ISU elementary education majors in the last year of their studies, the exact number yet to be decided, would be placed on site in the district. The students would take their final course work, consisting of teaching methods classes, at the district taught by ISU faculty who would commute to the district for this purpose. While not in their ISU classes the students would be observing, helping and, eventually, student teaching in classrooms in District #21. A list of 14 assumptions was developed that reflected the current state of planning for the PDS:

1. ISU students will receive 16 semester hours during the Fall term for methods courses in reading, language arts, science, and social science along with the related clinical experiences. In the Spring they will receive credit for 12 semester hours of student teaching and have the option of 3 semester hours of additional course work.
2. The nine month experience will be divided into a number of phases rather than two semesters. Each phase will differ in the way course work is scheduled, the way classroom experiences are scheduled, and the level of responsibility of the student. Experiences traditionally associated with student teaching will begin during the late Fall semester and some of the methods course experiences will take place during the Spring semester.
3. Several ISU students will be assigned to each participating school in the district, but will not be assigned to one teacher for the full year.
4. Three ISU faculty will provide primary instruction for the four methods courses.
5. ISU students will be divided into three groups. Each group will, along with one of the three ISU faculty, meet regularly in seminar to consider general issues which arise throughout the year and establish a year-long continuity to the program.

6. ISU students will spend the entire academic year at the Wheeling site with no responsibilities for experiences at ISU. Students will begin on August 21st; follow the district schedule until the end of December; begin again on January 3rd; following the District schedule during the Spring semester; and finish on May 12th.
7. ISU students will be in district schools five days a week, following the work schedule of the district. Although the schedule will vary, during the Fall term students will spend half of the time with ISU faculty and half of their time in classroom with students. (In the typical program students spend less than one-fourth of the semester in classrooms with students.)
8. During the Fall term supervision of the classroom clinical experiences will be the joint responsibility of the ISU faculty and the classroom teachers with whom the ISU students work during the year.
9. ISU students will move through the phases of the year based on their level of accomplishment rather than on a common time line.
10. Throughout the year ISU students will experience a range of grade levels with a diverse student population.
11. ISU students will be expected to apply knowledge gained from other methods courses (mathematics, music, art, theater, and physical education) as well as general pedagogical principles from other course work.
12. The year will begin with an activity that causes students to focus on the wide range of components of the classroom and will provide a mechanism for the year-long study of education.
13. Students will be guided to develop portfolios of their work and the ability to assess the components of the folio which they establish.
14. At the beginning of each phase (perhaps in conjunction with the District's grading period) a schedule of student time will be published.

Three ISU faculty from the Department of Curriculum and Instruction were selected to work with District #21 this first year and to teach the ISU classes on-site in the district. These individuals, and the courses they taught during the first semester, were:

Dr. Susan Davis Lenski	C&I255: Teaching Reading in the Elementary Schools
	C&I256: Teaching Language Arts in the Elementary Schools
Dr. Robert Fisher	C&I257: Teaching Science in the Elementary Schools
Dr. Thomas Ryan	C&I258: Teaching Social Studies in the Elementary Schools

Drs. Fisher and Ryan were to commute from ISU to District #21, a one-way drive of about 2.5 hours, once every week or two (depending on the schedule of activities at that time). These faculty would typically spend one or two days on-site at the district, teaching their respective courses to the ISU students, consulting with students and District #21 teachers, and observing in the classrooms. Dr. Lenski, who lived much closer to the district, would be on site for several days each week. In addition to teaching her two courses Dr. Lenski would serve as the primary contact faculty for the ISU students and the District #21 personnel. During the Fall semester all

three faculty would also be involved in supervising the students' field experiences in each of the various disciplines.

To provide a comparative perspective consider the courses that were held on the ISU campus during the same Fall, 1995 semester:

C&I255	Four sections on campus, average of 24 students/section (96 total)
C&I256	Four sections on campus, average of 24 students/section (96 total)
C&I257	Five sections on campus, average of 24 students/section (120 total)
C&I258	Five sections on campus, average of 24 students/section (121 total)

Information about the project was circulated to eligible ISU students and applications were accepted and reviewed. A total of 32 elementary education majors were eventually selected to participate in the first year inaugural effort. Planning meetings were held with these students to distribute information about the project as it became available, and to insure that course and graduation requirements were to be met (this was an important concern as the students would be finishing their final year of undergraduate education away from campus).

A two day workshop was scheduled in early June that brought together the mentor teachers from the district and the participating ISU students. The purpose of this experience was to minimize the stress that accompanies any new venture, and to provide a chance for the ISU students to get to know their new mentor teachers and the community. The latest planning and scheduling information was distributed to all of the attendees, and group team-building exercises were used to introduce everyone to each other. By all accounts the workshop was a great success, serving its purpose of introduction and familiarization.

The ISU students were also required to be in attendance at the district one week prior to the opening of school in late August. This week allowed the ISU faculty several days to begin their course work. It also provided a time for ISU students to meet and begin interacting with their mentor teachers. Each ISU student was assigned to a mentor teacher who would serve as the student's "home base". As the student progressed through the year they could always return to this first mentor teacher for advise and consultation. The 1995-1996 school year in District #21 began on August 25th.

The Research Design

From the outset faculty and administrators at Illinois State University were interested in what difference participation in a professional development school might make to the students. A review of the literature informed the planning group and researchers of the kind of studies that had been performed in the past. Discussions were held to refine research desires, and to fit them into a workable time line and budget.

At the heart of these considerations was the notion of comparative analysis. Engaging in a PDS project was a substantial break from a traditional model that, for the most part, well served

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the enrolled students and participating school districts. While everyone wanted to know the project's strengths and weaknesses, there was an even greater concern that the PDS not provide an inferior experience to the participating ISU students when compared to their peers engaged in the more traditional program. Studying student course grades or other standardized tests of performance could have been examined but was not pursued for several reasons. The chief among these reasons was that such a study would only identify differences without informing about the underlying reason contributing to that difference. A method that provided more information about the project's impact across many areas of interest was needed.

Under this directive the research team spent several months studying factors and issues that were of concern in both teacher education, in general, and professional development schools, in particular. Their work resulted in the development of two instruments: a 150-item written questionnaire and a 13-item semi-structured personal interview (see the Appendix for copies of both of these instruments). The written questionnaire consisted of nine sections:

1. Demographics
2. Your understanding of selected topics
3. You comfort with selected topics
4. What makes a masterful teacher?
5. What makes an exemplary school?
6. Your thoughts about teaching and learning
7. Your thoughts about things that influence teaching
8. Your thoughts about diversity
9. Your thoughts about new teacher preparation

The administration protocol called for the written questionnaire to be administered to four different groups: the ISU students participating in the PDS project, the ISU students participating in the regular student teacher experiences, mentor teachers from District #21 participating in the PDS project, and mentor teachers from other districts participating in the regular program. In order to measure change over time the questionnaire was to be administered twice: once at the beginning of the school year and once at the end of the year.

Two special accommodations had to be made for this protocol to work. The first involved the numbers of students chosen for each group, and beginning of the year to the end of the year subject matching. It was decided to sample all of the ISU students participating in the PDS effort (32 students), while only utilizing a random sample of the ISU students participating in the regular student teacher program. The reason for the sampling was to keep the sizes of these two groups relatively close to each other — as there were well over 100 students in the regular program the sheer size of that group could overwhelm smaller differences a more matched size study would detect. The added cost of sampling all of those students was also a factor in this sampling consideration. Another concern was the matching of responses from the beginning of the year to the end of the year. While the ideal study would match subject responses, doing so required identifying each respondent and insuring that each respondent complete both the beginning and end instrument administrations. Given the smaller group sizes being used, the need to maintain

response confidentiality, and a desire to study only differences group-wise rather than based on individuals the decision was made to proceed with an independent samples approach. No subject matching was performed from the beginning to the end of the year; instead, all respondents were separated into their groups and the groups analyzed one against the other.

The other accommodations concerned when, during the year, each group was sampled. The reason for this concern was that the PDS students were in the school district for the entire year while their on-campus counterparts did not go into their district classrooms, at least on a regular basis, until the beginning of the Spring, 1996 semester. Both groups, however, would be taking the four C&I courses at roughly the same times. To best manage these different starting times the following schedule was developed:

Respondent Group	Administration	When Accomplished
PDS Students	First	early September, 1995
Regular Students	First	early September, 1995
PDS Mentors	First	early September, 1995
Regular Mentors	First	[early January, 1996]
PDS Students	Second	late April, 1996
Regular Students	Second	early May, 1996
PDS Mentors	Second	late April, 1996
Regular Mentors	Second	early May, 1996

A combination of technical and administration difficulties prevented the regular mentors from being administered their beginning of the year survey in early January of 1996. This resulted in only an end of the year response from these mentors (this is reflected in the analysis that follows).

The 13-item, semi-structured personal interview was administered to each of the participating ISU faculty, as well as several key ISU administrators, early in the Spring of 1996. A modified form of this interview was administered to participating PDS students during several on-site visits that occurred throughout the school year.

Results from the 150-Item Questionnaire

Data from the 150-item questionnaire were gathered from the respondents using optical mark forms, and were scanned into the computer using a Scantron 4200 OMR scanner. These data were these imported into SPSS version 7 for Windows 95 for analysis. Frequencies, means, standard deviations, skews and kurtosis were all examined to insure that the data were sufficiently well conditioned for group differences analysis. Respondent means by question by group are presented in tables one through eight.

Group differences were examined using an independent t-test approach. The results from these tests, along with the level of significance (at either $p < .05$ or $p < .01$) are reported in tables nine through sixteen. For each of the 150 items the following group comparisons were performed (the text in **bold** indicated the corresponding abbreviation used in tables nine through sixteen):

1. Beginning of the year PDS students (**BPS**) vs the beginning regular students (**BRS**)
2. Beginning of the year PDS mentors (**BPM**) vs the end of the year regular mentors (**ERM**)
3. Beginning of the year PDS students (**BPS**) vs end of the year PDS students (**EPS**)
4. Beginning of the year regular students (**BRS**) vs end of the year regular students (**ERS**)
5. Beginning of the year PDS mentors (**BPM**) vs end of the year PDS mentors (**EPM**)
6. End of the year PDS students (**EPS**) vs end of the year regular students (**ERS**)
7. End of the year PDS mentors (**EPM**) vs end of the year regular mentors (**ERM**)

In an effort to discern underlying patterns of group difference pairwise discriminant studies were also run on each of the above comparisons using questions clustered on the eight major survey topics. Significant results (at the $p < .05$ level) are summarized in Table 17.

Your Understanding of Selected Topics

The category "Your Understanding of Selected Topics" asked twenty questions to determine how much a respondent felt that he or she understood certain specific aspects of language arts instruction. There were no statistically significant differences between the PDS and Regular students when queried at the beginning of the year, although the PDS students did report lower scores on most of the items, on average, than the Regular students. Likewise, no statistically significant differences were found between the groups at the end of the year assessment on these twenty items (see Tables 1 and 9).

Although there were no statistical differences between the groups, the mean scores of the PDS students from the beginning to the end of the year did show a statistically significant increase in many (11) areas. The areas of process writing, integrating language arts, writing assessment, methods of grouping, holistic assessment, silent sustained reading, comprehensive strategies, vocabulary strategies and content area reading showed significant statistical increases at the $p < .01$ level, and punctuation and phonics at the $p < .05$ level. The regular students evidenced significant increases from the beginning to the end of the year at the $p < .01$ level only in content area reading and holistic assessment, and at the $p < .05$ level in integrating language arts.

One possible explanation for the differences in beginning to end of year gains involves a consideration of the venue each student experienced when completing the beginning of the year questionnaire. The Regular students were on campus, in a comfortable and familiar environment while the PDS students were experiencing their first few weeks in a new community and educational setting. The stress of change, being the first to attempt a new program, high expectations of success and a desire to succeed may have combined to lower the PDS students' initial perceptions of their own skills. The continuing presence of Dr. Lenski throughout the PDS student experience, however, allowed the students on-the-spot, relevant training and feedback. The lack of significant differences between the two groups by the end of the year demonstrates the success of the Dr. Lenski and the PDS program in helping PDS the students to overcome these stressors.

Beginning of the year PDS mentors' mean scores indicated a higher perceived level of understanding compared to their regular counterparts for methods of grouping and content area reading (at the $p < .01$ significance level) and in process writing and holistic assessment (at the $p < .05$ level of significance). Only four of the 20 items achieved this level of statistical significance. On every item, save one, the beginning PDS mentors' means showed a higher degree of understanding than the regular mentors. No statistically significant changes were found between the PDS mentors' mean scores from the beginning of the year to the end of the year. End of the year PDS mentors' mean scores indicated a higher perceived level of understanding compared to their regular counterparts for writing assessment and content area reading (at the $p < .01$ significance level) and in process writing and holistic assessment (at the $p < .05$ level of significance). Ending PDS mentors' mean scores were only lower than regular mentors in oral reading, spelling and word identification (although not statistically significantly lower).

An interesting note is the high degree of stability exhibited by the PDS mentors from the beginning of the year to the end of the year. Other than the four items noted above the PDS mentors were also very similar to the Regular mentors at both measuring points. It appears, at least from the results of the t-tests, that the PDS program had virtually no effect on the mentors' understanding of these twenty topics.

Discriminant analysis extracted two significant ($p < .01$) functions, one separating the end of the year PDS students from the end of the year Regular students and the other separating the end of the year PDS mentors from the end of the year Regular mentors. Eleven of the twenty items were significant in determining the makeup of this first function (in order of decreasing magnitude of their standardized coefficient): vocabulary strategies, comprehension strategies, content area reading, handwriting, writing assessment, informal writing, oral reading, listening skills, word identification, spelling, and process writing. The first function differentiated students who were more comfortable in their understanding of informal writing, spelling, handwriting, comprehension strategies and word identification (the Regular students) from those more comfortable with listening, process writing, writing assessment, oral reading, vocabulary strategies, and word identification (the PDS students).

Nine of the twenty items were significant in determining the makeup of the second function (in order of decreasing magnitude of their standardized coefficient): content area reading, oral reading, informal writing, holistic assessment, process writing, handwriting, standard English grammar, vocabulary strategies, and word identification. This second function differentiated mentors who were more comfortable in their understanding of standard English grammar, process writing, handwriting, holistic assessment, and content area reading (the PDS mentors) from those more comfortable with informal writing, oral reading, vocabulary strategies, and word identification (the Regular mentors).

Your Comfort with Selected Topics

The category "Your Comfort with Selected Topics" posed twenty questions about the respondents' comfort teaching the same selected language arts topics previously addressed at the

understanding level. Once again there were no statistically significant differences between the beginning PDS students and the beginning regular students, although the beginning PDS students reported lower means than the beginning regular on twelve of the twenty questions. However, there were no statistically significant differences between the ending PDS student means and the ending regular student means for understanding of these topics. In the area of teaching comfort for these topics, the ending PDS student means were statistically significantly higher than the ending regular students in nine areas: teaching comprehension strategies ($p < .01$), English grammar, spelling, writing assessment, methods of grouping, sustained reading, phonics, oral reading, and vocabulary strategies ($p < .05$).

Ending PDS students showed statistically significant increases over beginning PDS students at the $p < .01$ level in all twenty areas save one -- handwriting. In contrast, the ending regular students showed statistically significant increases over beginning regular students in only five areas: content area reading ($p < .01$) and informal writing, process writing, handwriting, and holistic assessment ($p < .05$). The fact that there were no statistically significant differences between the ending PDS students and the ending regular students in the five areas in which both groups evidenced statistically significant differences (albeit at different levels) in comparison to their beginning surveys would seem to indicate that the two groups' growth was at a par in informal writing, process writing, holistic assessment and content area reading.

The dramatic gains of the PDS students as compared to those of the regular students could again be attributed to the venue each student experienced when completing the beginning of the year questionnaire. The Regular students were on campus, in a comfortable and familiar environment while the PDS students were experiencing their first few weeks in a new community and educational setting. The stress of change, being the first to attempt a new program, high expectations of success and a desire to succeed may have combined to lower the PDS students' perceptions of their own skills. The continuing presence throughout the year of university language arts faculty in the person of Dr. Lenski, providing relevant training and feedback may also have added to the larger gains of the PDS students. However, the larger number of statistically significant differences between ending PDS students and ending regular students would seem to indicate that the PDS program has, in fact, produced a higher level of perceived teaching adequacy in those topics than the comparable regular program did for its students.

Ending PDS mentors did not show a statistically significant difference in their comfort with teaching language arts topics when compared to the beginning PDS mentors. Beginning PDS mentors were only statistically significantly higher ($p < .05$) than regular mentors in three areas: speaking, process writing, and holistic assessment.

The beginning PDS mentors did generally evidence higher means (on 18 or the 20 items) than the regular mentors regarding their comfort teaching these language arts topics. Based on those initial means the beginning PDS mentors did not evidence any statistically significant increase from their beginning to ending survey means but still increased significantly over the regular mentors in twelve topics. Speaking skills, informal writing, process writing, writing assessment, methods of grouping, holistic assessment and emergent literacy skills were statistically significant

at the $p < .01$ level and listening skills, handwriting, sustained reading, comprehension strategies and content area reading at the $p < .05$ level. These data strongly suggest that the feedback from, contact with, and relationships developed among the district teachers and the university faculty throughout the year did indeed make a difference in the comfort level of the PDS mentors in teaching language arts.

Discriminant analysis extracted two significant ($p < .05$) functions, one separating the beginning of the year PDS students from the end of the year PDS students and the other separating the end of the year PDS mentors from the end of the year Regular mentors. Eleven of the twenty items were significant in determining the makeup of this first function (in order of decreasing magnitude of their standardized coefficient): writing assessment, holistic assessment, silent sustained reading, spelling, emergent literacy skills, integrating language arts, content area reading, standard English grammar, process writing, informal writing, methods of grouping. The first function differentiated students who were more comfortable in their teaching of standard English grammar, process writing, spelling, content area reading, and emergent literacy skills (the beginning of the year PDS students) from those more comfortable in their teaching of informal writing, integrating language arts, writing assessment, methods of grouping, holistic assessment, and sustained silent reading (the end of the year PDS students).

Six of the twenty items were significant in determining the makeup of the second function (in order of decreasing magnitude of their standardized coefficient): oral reading, process writing, comprehension strategies, silent sustained reading, handwriting, and spelling. This second function differentiated mentors who were more comfortable in their teaching of process writing, spelling, handwriting, silent sustained reading, and comprehension strategies (the end of the year PDS mentors) from those more comfortable in their teaching of oral reading (the end of the year Regular mentors).

What Makes a Masterful Teacher?

Respondents indicated their level of agreement with statements about what teaching methods, techniques, traits and concerns masterful teachers should exhibit in the category of "What Makes a Masterful Teacher." No statistically significant differences were found between the beginning PDS students and the beginning regular students. The two groups seem to have a very similar consensus of what makes a masterful teacher.

The ending PDS students' means showed a significant increase ($p < .01$) over the beginning PDS students' means in their feeling of agreement with the statement (#53) "masterful teachers are concerned with learning style." They showed a significant increase ($p < .05$) in their feelings of agreement with the statement (#41) "masterful teachers develop special ways to listen to their students" and (#51) "master teachers see each student as an individual, not as a mass, a group or a class." The year's experience seemed to have strengthened the PDS students' original beliefs.

Significant change ($p < .01$) was indicated between the beginning regular students and ending regular students from strong agreement to absolute agreement with the statement (#41)

"masterful teachers develop special ways to listen to their students", (#43) "a masterful teacher understands what factors motivate students to study", (#46) "a masterful teacher continuously seeks new ways for students to learn subject matter" and (#49) "masterful teachers want to help students to value learning." The same group showed significant change ($p < .05$) from strong agreement to stronger agreement with statement #48 "a masterful teacher is challenged to motivate students ."

The change between beginning and ending regular students' means from disagreement to a stronger disagreement with the statement (#52) "peer coaching and collegial relationships detract from masterful teaching" and (#60) "a masterful teacher is not concerned with order and discipline" was statistically significant at the $p < .01$ level. The same group's beginning and ending means changed significantly from disagreement to a stronger disagreement at the $p < .05$ level for the statement (#42) "masterful teachers do not often think about their teaching", (#47) "a masterful teacher thinks that increasing students' feelings of accomplishment is not important-how much the student learns is what matters", and (#58) "masterful teachers are not concerned with grade-level curriculum." Over the course of the year the regular students became even more convinced that masterful teachers are highly concerned with numerous variables that affect and enhance student learning.

The comparison of ending PDS students to ending regular students was statistically significant for only three statements. Both groups disagreed with the statement that a masterful teacher is not concerned with order and discipline; however, the ending regular students' means were significantly different at the $p < .01$ level. It is interesting that the ending PDS survey showed a stronger agreement with the statement than the beginning PDS survey, albeit not significantly so, but that the ending regular students' survey means showed a significantly stronger disagreement with the statement at the $p < .01$ level than the beginning regular students. The two groups moved in opposite directions concerning their beliefs about this statement. The ending PDS students came to believe that order and discipline are not as important traits of a masterful teacher as they had previously thought while ending regular students came to believe that order and discipline were more important concerns of a masterful teacher. This may be a result of nothing more than differences in teaching and classroom management styles between the districts under study, or it may be a direct effect of the PDS style of cooperative instruction and open practice.

The strength of the ending regular students agreement, when compared to the ending PDS students, with statement (#48) "a masterful teacher is challenged to motivate students", was significant ($p < .05$). Although both groups strongly disagreed with the statement (#52) "peer coaching and collegial relationships detract from masterful teaching", the differences in the means of the ending regular students and the ending PDS students were significant at the .05 level. No general consensus could be drawn regarding the merits of the PDS program from these differences.

Beginning PDS mentors were in very strong agreement ($M = 4.90$) with statement #46 "a masterful teacher continuously seeks new ways for students to learn subject matter", but by the end of the year had significantly ($p < .05$) increased that level to absolute agreement ($M = 5.0$).

Conversely, the strong agreement ($M = 4.88$) which the beginning PDS mentors felt with statement #48 "a masterful teacher is challenged to motivate students" lessened significantly ($p < .05$) by the end of the year ($M = 4.56$).

Regular mentors' means were significantly lower ($p < .01$) than the beginning PDS mentors on only one statement (#53) "masterful teachers are concerned with learning style." Ending PDS mentors showed stronger agreement ($p < .01$) than the regular mentors statement # 45 "masterful teachers know that the process of understanding and improving one's teaching must start with reflection upon one's own experience." Both groups disagreed with statement #44 "whether the principal thinks there is too much noise in his or her classroom would tend to worry a masterful teacher" with the ending PDS mentors' disagreement evidenced as stronger ($p < .05$) than the regular mentors'. Overall the changes in the PDS mentors' opinions about the traits of masterful teachers over the course of the year appear to be minimal.

Discriminant analysis failed to detect any significant functions that might separate any of the pairs of groups on these twenty questions.

What Makes an Exemplary School?

The category "What Makes an Exemplary School?" consists of statements with which respondents classified their degree of agreement or disagreement about the traits, requirements, culture and practices of exemplary schools.

The beginning PDS students and beginning regular students evidenced significant differences ($p < .01$) in the level of their agreement/disagreement with four statements about exemplary schools. Both groups strongly agreed with the statement (#68) "teachers in an exemplary school frequently raise questions about professional practice and often think about ways to change" and (#74) "responsibilities of school faculty in an exemplary school include the development of new forms of school organization and new ways of scheduling the school day." Both groups also strongly agreed with statement (#77) "exemplary schools take the time to learn why some students progress slower", but again the beginning PDS students showed a stronger disagreement ($p < .05$). On question #78, "in an exemplary school diagnosing student learning problems is left to the experts", the beginning PDS students evidenced a stronger disagreement than the regular students.

The major differences between the beginning PDS students and the beginning regular students lay in their opinions regarding the organizational responsibilities of teachers in exemplary schools and the responsibilities of the school regarding students with learning problems. The beginning PDS students were in stronger agreement than the regular students with the concept that exemplary school teachers are responsible for duties beyond just classroom teaching and that the school must take an active role in programs for students with learning problems.

The PDS students showed significant change from the beginning of the year to the end in their disagreement with only one question -- (#63) "exemplary schools rarely provide venues for new

teacher development or the continuing professional development of veteran teachers." Over the course of the year these students moved from disagreement with this item to stronger disagreement. It would seem that their initial opinions about the culture of exemplary schools were proven out in their PDS experience except they found that new teacher and continuing professional development were even more important in exemplary schools than they had originally thought.

Regular students changed significantly in their degree of agreement/disagreement with eight different concepts about exemplary schools between the beginning and end of the year. Over the course of their experience they changed significantly ($p < .01$) from an initially strong agreement to a stronger agreement on the following items: (#68) "teachers in an exemplary school frequently raise questions about professional practice and often think about ways to change"; (#73) "the communication among teachers in an exemplary school is open and candid", and (#80) "part of the job of a teacher in an exemplary school is to guide students towards intellectual and emotional growth ." They also changed significantly ($p < .05$) from strong agreement to a stronger agreement on the questions: (#67) "exemplary schools allow teachers time to reflect upon effective practice"; (#74) "responsibilities of school faculty in an exemplary school include the development of new forms of school organization and new ways of scheduling the school day", and (#77) "exemplary schools take the time to learn why some students progress slower."

From the beginning of the year to the end, the regular students changed their disagreement significantly ($p < .01$) on items #62, "curricula and departmental organization are unchanged in an exemplary school" and #63, "exemplary schools rarely provide venues for new teacher development or the continuing professional development of veteran teachers." Over the course of their experience the regular students strengthened their agreement with the general concept that exemplary schools encourage teachers to be a part of the academic process beyond just their classrooms and support growth and development throughout.

The only area of significant difference ($p < .01$) between the ending PDS students and the ending regular students was on item #62, "curricula and departmental organization are unchanged in an exemplary school." Both groups disagreed with the statement, but the ending regular students showed a stronger disagreement than the ending PDS students. This difference could be tied to the activities that were addressed at the various schools in which the regular students were placed rather than a routine characteristic difference between the PDS program and regular programs.

The change from the PDS mentors' beginning surveys to their end-of-the-year surveys offered some interesting insight into the program. Their degree of disagreement lessened significantly ($p < .01$) on statements #71, "exemplary schools have many non-instructional duties for teachers" and #75, "competition among exemplary school teachers is a step in developing collegiality." It lessened at the $p < .05$ level with statements #69, "an exemplary school's faculty rarely raise questions about the school's organization", and #72 , "in an exemplary school a teacher's job consists of transmitting basic information." Their level of agreement lessened significantly ($p < .05$) with statement #64, "classroom-oriented educational research should be conducted in

exemplary schools" and #76, "in an exemplary school the business of teaching children is paramount." It would appear that over the course of the year the PDS mentors came to believe that educational research was not as desirable in exemplary schools as they had previously thought, and that faculty do not raise questions as often as they had previously thought! These changes would not be consistent with most PDS philosophies or models; however, these mentors did increase their agreement that exemplary schools involve teachers in duties and responsibilities outside of the classroom -- both of which are PDS posits.

The beginning PDS mentors felt more in agreement ($p < .01$) than the regular mentors with statement #64 "classroom-oriented educational research should be conducted in exemplary schools." They felt more in agreement (at $p < .05$) with #61, "an exemplary school values each student as a member in a community of learners than the regular mentors"; #65," principals in exemplary schools work hard to keep their staff alive and growing;" #67, "exemplary schools allow teachers time to reflect upon effective practice;" and #73," the communication among teachers in an exemplary school is open and candid" than the regular mentors.

Significantly stronger disagreement ($p < .01$) was shown by the beginning PDS mentors on #69, "an exemplary school's faculty rarely raise questions about the school's organization" and #71, "exemplary schools have many non-instructional duties for teachers" ($M = 1.14$ and 1.61 respectively), than by the regular mentors ($M = 1.63$ and 2.30 respectively.) At the $p < .05$ level of significance the beginning PDS mentors indicated a higher level of disagreement with statements #62, "curricula and departmental organization are unchanged in an exemplary school"; #70, "a school becomes an exemplary school because it is able to establish a set instructional routine with a curriculum that is demanding and inflexible"; and #72, "in an exemplary school a teacher's job consists of transmitting basic information" ($M = 1.23$, 1.18 and 1.57 respectively) than the regular mentors ($M = 1.46$, 1.49, and 2.01 respectively).

Generally, the beginning PDS mentors felt more strongly than the regular mentors that exemplary schools should be an open environment that is conducive to learning by all and in which faculty are involved in all aspects of the educational process. These responses are congruent with an emerging PDS philosophy.

In contrast to the above results the ending PDS mentors showed a statistically significant difference ($p < .05$) in only two areas. They disagreed more strongly ($M = 1.20$) than the regular mentors ($M = 1.49$) with statement #70 that "a school becomes an exemplary school because it is able to establish a set instructional routine with a curriculum that is demanding and inflexible". Though not very a radical show of strength, still their means did indicate significantly more agreement ($M = 2.28$) than the regular mentors ($M = 1.71$) with statement #75 that "competition among exemplary school teachers is a step in developing collegiality". Since the PDS mentors' beginning surveys exemplified the PDS philosophy in so many more areas than the regular mentors, it is interesting that those differences disappeared by the end of the year surveys. We can only wonder what changed their opinions — what elements in the program did not meet expectations — from the beginning to the end of the year.

A discriminant analysis produced only one significant function ($p < .05$) separating the beginning of the year PDS mentors from the end of the year regular mentors. Although this function was statistically significant it is less than useful for three important reasons. First, the function relies almost completely on only two variables to perform its classification: (#71) "exemplary schools have many non-instructional duties for teachers" (the end of the year regular mentors) and (#78) "In an exemplary school diagnosing student learning problems is left to the experts" (the beginning of the year PDS mentors). None of the other 18 items in this section contribute in any important way to the classification. Second, the post-classification subject grouping is only moderate, with only 75% of the respondents being classified into their correct group as a result of the function. Third, and most important, the difference disappears by the end of the year. Although this difference is present with the beginning of the year PDS mentors by the end of the year no differences exist that can reliably separate these two groups using the twenty items of this section.

Your Thoughts About Teaching and Learning

The next section of the survey was titled "Your Thoughts about Teaching and Learning". It contained twenty statements about the effect of instructional methods and techniques, classroom environment, cultural and social factors on the educational process. The respondents registered their degree of agreement with these statements on a scale of one to five with one being low and five being high.

The means of the beginning PDS students and beginning regular students were significantly different at the $p < .05$ level on three statements. The beginning PDS students had a mean of 4.90 compared to the regular student mean of 4.70 on statement #81, "involving students in problem-solving better prepares them for today's workplace". On statement #84, "student learning that incorporates personal initiative and democratic problem solving are educational frills, not too useful in today's workplace", and statement #89, "teachers cannot adapt themselves to the different needs of all students" the means of the beginning PDS students were significantly lower than the beginning regular student at the $p < .05$ level. It would appear that initially both groups held a similar consensus on most of this category's concepts but that the beginning PDS students' means showed a stronger agreement than the regular students when considering whether teachers should be able to adapt to their students' needs and that involving their students through problem solving and initiative techniques were good teaching/learning concepts.

There were no statistically significant differences between the means of the beginning PDS students and the ending PDS students. The trend evidenced a generally even distribution between those items whose means that increased (8) and those that decreased (12).

The decrease from the beginning regular students' means to the ending regular students means was significant ($p < .01$) for statement #89 "teachers cannot adapt themselves to the different needs of all students" and ($p < .05$) for statement #84 "student learning that incorporates personal initiative and democratic problem solving are educational frills, not too useful in today's workplace." The increase between the means of the beginning and ending regular students over

the course of the year was significant ($p < .05$) for statement #99 "making decisions cooperatively helps build student confidence." By the end of the year the regular students' felt more strongly than they had in the beginning of the year that teachers can adapt themselves to the different needs of all students and that students should be active participants in the development of their own educational process.

There were no statistically significant differences between the means of the ending PDS students and the means of the ending regular students. The trend of higher and lower means was generally balanced between the two groups with two ties. There would seem to be no major differences in the opinions of these two groups about the selected issues in teaching and learning.

Beginning PDS mentors' means were significantly higher than regular mentors' means in three areas. On statement #81, "involving students in problem-solving better prepares them for today's workplace", the difference was at the significant and the $p < .01$ level. The difference between the two groups on statement #82 "students need more time in drill and practice learning basic skills and concepts" and statement #85 "active student participation and directed discussion creates a classroom in which everyone learns from one another" was at the $p < .05$ level of significance.

The beginning PDS mentors' means were significantly lower than the regular mentors' means in their response to six of this section's statements. Statement #84 "student learning that incorporates personal initiative and democratic problem solving are educational frills, not too useful in today's workplace" and #93 "poor instruction is primarily responsible for low student achievement" were lower (at the $p < .01$ level). Statement #91 "cultural background is the major force that shapes learning"; #95 "the classroom teacher is the primary influence on student learning"; #96 "the core body of content is the most important aspect of the educational process"; and #100 "teachers are storehouses of knowledge which they pass along to children" all evidenced differences at the $p < .05$ level. Overall, the beginning PDS mentors showed a stronger belief that children should be involved in their own programs for learning and that no one procedure is predominantly responsible for the level of a child's learning.

The decrease of the ending PDS mentors means from the beginning PDS mentors means was significant ($p < .05$) for only two statements. Those statements were # 81 "involving students in problem-solving better prepares them for today's workplace" and #82 "students need more time in drill and practice learning basic skills and concepts."

There were no significant differences between the ending PDS mentors' means and the ending regular mentors' means. This change from nine significant differences between the beginning PDS mentors and regular mentors indicates that over the course of the year the PDS mentors moved closer to the regular mentors in their degree of agreement about the twenty teaching and learning concepts listed. It would seem that the mentor teachers who entered the PDS project, either by virtue of preparation or natural inclination, initially held certain concepts which, for whatever reason, disappeared by the end of the year.

Discriminant analysis extracted one function significant at the $p < .05$ level. This function separates the beginning of the year PDS mentors from the end of the year regular mentors. Only four out of the twenty items contributed in a significant way to this function. These four items, in decreasing order according to the magnitude of their standardized coefficient, were: (#100) "Teachers are storehouses of knowledge which they pass along to children", (#82) "Students need more time in drill and practice learning basic skills and concepts", (#93) "Poor instruction is primarily responsible for low student achievement", and (#94) "Socialization is the most important aspect of the education process". Beginning of the year PDS mentors tended to be identified more items #82 and #94 while the end of the year regular mentors with items #93 and #100. As with the prior discriminant function this separation, while statistically significant, is not as strong as one would like. Only 82% of the respondents were correctly classified into their respective groups in a post-classification analysis, and the magnitudes of the standardized coefficients were all uniformly small.

Your Thoughts About Things that Influence Teaching

Another category was titled "Your Thoughts about Things that Influence Teaching", which was composed of twenty more statements about various aspects of teaching including such topics as: classrooms, assistants, planning, time, requirements, curriculum and testing, and restructuring. Once again the respondents were asked to rate their level of agreement with the statement on a scale of one to five with one being total disagreement and five being total agreement.

The beginning PDS students showed a significantly lower mean than the beginning regular students (at the $p < .01$ level) for statement #101 "most teachers have too many students in their classes"and #118 "the curriculum in most schools is too inflexible." The beginning PDS students showed a significantly higher mean than the beginning regular students (at the $p < .05$ level) for statement #117 "student teachers can contribute to restructuring efforts" and #119 "schools and universities should jointly assume responsibility for restructuring." Overall the beginning PDS students felt more strongly than the regular students that classes are not overcrowded, that curriculum is not too inflexible and that student teachers, schools and universities can and should contribute to restructuring.

Once again there were no significant differences between the means of the beginning PDS students and the ending PDS students. This would seem to indicate that the PDS experience did not change their beliefs about the things that influence teaching in any significant way.

Ending regular students' means were significantly higher than beginning regular students (at the $p < .05$ level) for statements #102 "classroom teachers usually receive inadequate assistance from specialized teachers" and #119 "schools and universities should jointly assume responsibility for restructuring." However, ending regular student means were significantly lower ($p < .05$) than beginning regular student means for statement #108 "instruction and testing designed and recommended by recognized experts should remain the central element of education reform." It would seem that the regular students became disenchanted with specialized teachers throughout

the course of their experience while at the same time strengthening their belief that schools and universities should work together for reform.

Ending PDS and ending regular students' means were significantly different with the latter being higher, at the $p < .05$ level, on only two statements. Those statements were #103 "there is insufficient clerical help for teachers" and #112 "teaching changes as a result of systematic inquiry about teaching and learning." The experiences of the two groups had moved them closer together in their philosophies. It would seem that the significant differences between the ending PDS students and the ending regular students arise from a complaint heard during the on-site visits from the PDS students to the effect that their mentors just saw them as "another pair of hands", and that they (the PDS students) did not see any systematic inquiry about teaching and learning during their experience.

The difference between beginning PDS mentors and regular mentors was significant ($p < .01$) on statement #101 "most teachers have too many students in their classes" with the regular mentors showing a higher mean than the beginning PDS mentors. On statement #113 "recommendations of expert consultants are better suited for improving practice than school faculty recommendations" the higher means evidenced by the regular mentors were significant at $p < .05$ level The two groups evidenced a difference significant at the $p < .05$ level for statement #107 "teachers are required to meet too many standards and regulations;" #117 "student teachers can contribute to restructuring efforts;" and #120 "in most schools testing and grading procedures need to be improved." In each of these last three statements the beginning PDS mentors had higher means than the regular mentors. It is interesting to note that on items #101 and #117 the difference between the beginning PDS students and the beginning regular students, and the difference between the beginning PDS mentors and regular mentors, were equally significant. It would seem that beginning students and mentors had similar attitudes about the ideal class size and the abilities of student teachers.

Beginning PDS mentors and ending PDS mentors were only significantly different ($p < .05$) on three statements. These three were #108 "instruction and testing designed and recommended by recognized experts should remain the central element of education reform;" #111 "the educational system will be invigorated only if democratic styles of management are adopted;" and #113 "recommendations of expert consultants are better suited for improving practice than school faculty recommendations." In each of these three areas the PDS mentors increased their agreement with these statements over the span of the year's experience.

By the end of the year the difference between PDS mentors' means ($M = 4.24$) and the regular mentors' means ($M = 3.58$) changed from a significance at a $p < .05$ level to significance at a $p < .01$ level on statement #117. The change was due to an increase the PDS mentors' means which widened the difference between PDS mentors and regular mentors by year end. The difference between the ending PDS mentors' means and the regular mentors' means was also significant at the $p < .01$ level for statement #111 "the educational system will be invigorated only if democratic styles of management are adopted." The significance between beginning PDS mentors and regular mentors by year end on statement #101 was significant at $p < .05$ due to an

increase in the PDS mentors' means over the course of the year which reduced the difference between the two groups' means. The difference between these two groups was also significant at the same level for statement #102 "classroom teachers usually receive inadequate assistance from specialized teachers." Due to an increase in the ending PDS mentors' means, which increased the difference between the ending PDS mentors' means and the regular mentors' means, statement #104 "teachers have more than enough time for class preparation and rest between classes" and #119 "schools and universities should jointly assume responsibility for restructuring" showed a significant difference at the $p < .05$ level.

The number of items that showed significant differences between the PDS mentors and the regular mentors doubled over the course of the year. By the end of the year the PDS mentors were more dissatisfied with class size and had developed stronger feelings that experts and democratic policies can help restructure the educational process.

Discriminant analysis found two functions for these twenty questions, one function differentiating between the beginning of the year PDS mentors and the end of the year regular mentors with the second function differentiating between the end of the year PDS mentors and the end of the year regular mentors. Both functions were significant at the $p < .05$ level, with both functions sharing almost the identical set of significant variables.

In the first function items #103 "there is insufficient clerical help for teachers", #111 "the educational system will be invigorated only if democratic styles of management are adopted", #119 "schools and universities should jointly assume responsibility for restructuring" and #120 "in most schools testing and grading procedures need to be improved" characterized the beginning of the year PDS mentors. On the other hand items #101 "most teachers have too many students in their classes" and #113 "recommendations of expert consultants are better suited for improving practice than school faculty recommendations" characterize the end of the year regular mentors.

In the second function items #103 "there is insufficient clerical help for teachers", #111 "the educational system will be invigorated only if democratic styles of management are adopted", #117 "student teachers can contribute to restructuring efforts", and #119 "schools and universities should jointly assume responsibility for restructuring" characterized the end of the year PDS mentors. Items #101 "most teachers have too many students in their classes", #110 "teachers who reflect and raise questions about their practice can change schooling", #115 "to improve instruction schools need to be reorganized to balance the individual work of a single teacher with the collaborative work of many teachers together", and #118 "the curriculum in most schools is too inflexible" characterizes the end of the year regular mentors.

Your Thoughts About Diversity

In a seventh category the respondents rated their feelings about diversity on a scale from one to five with one being total disagreement and five being total agreement. The statements ranged from the responsibility of the teachers to address inequalities in the classroom, to cultural affects

on learning, to society's effects on achievement and teachers' needs to understand psychological and cultural differences.

The beginning PDS students and beginning regular students registered no statistically significant differences in their means. Generally they held a very similar consensus about these topics. The difference between the beginning and ending PDS students was only statistically significant ($p < .05$) on one statement, #131 "it is hard for most teachers to meet the needs of different kinds of students." The PDS students would appear to have discovered that it is not as hard as they had initially thought to meet the needs of their various kinds of students since their agreement with the statement decreased over the year.

The difference between the beginning regular students' means and the ending regular students' means was significant for three statements. Agreement on statement #123 "an important task of schools is to build bridges between traditional school culture, the culture of students, and culture of the community" ($p < .01$) showed a significant increase from $M = 4.50$ in the beginning to $M = 4.91$ at the end. Statement #132 "teachers need to understand the psychological and cultural differences that underlie the diverse backgrounds of students in their classes" showed significant change ($p < .05$) due to an increase in mean scores from the beginning to ending regular students. Statement #124 "minority students come to school with cultural deficiencies" evidenced a significant change ($p < .05$) due to a decrease in the mean scores of the regular students from the beginning to the end of the year. Over the course of the year the regular students strengthened their agreement with the statement that schools and teachers must take an active role in understanding cultural differences and helping bridge the differences the students bring with them to school. However they lessened in their degree of agreement with the concept that minority students arrive at school with cultural deficiencies.

There were significant differences between the ending PDS students' means and the ending regular students' means on four of the items in this section. In each instance of significance, the ending PDS means were lower than the ending regular student means. As noted above there was no significant difference between the beginning PDS students and the beginning regular students on statement #131, although the ending PDS students means showed a decreased from the beginning of the year. The combination of the significant change in the ending PDS student means, and an increase in the final means of the ending regular students, created a significant difference between the two groups significant at the $p < .05$ level.

The difference between the ending PDS students and the ending regular students on statement #132 was significant ($p < .05$), the same difference and direction as that evidenced between the beginning and ending regular students. Statement #123 "an important task of schools is to build bridges between traditional school culture, the culture of students and the culture of the community;" and statement #125 "society plays a significant role in creating and maintaining differences in achievement" showed significant ($p < .05$) differences between the ending PDS students and the ending regular students. In general it seems that the regular students remained stable or increased their opinions while the PDS students remained the same. The PDS students had a fairly clear concept of the PDS philosophy in this category from the very beginning. This

would seem to be more related to the character of persons interested in new challenges rather than something endemic to the PDS program.

The difference between beginning PDS mentors' means and the regular mentors' means was significant for only two statements. In both of those two instances the PDS beginning mentors evidenced a lower mean, indicating a weaker agreement with the statement than the regular mentors. On statement #127 "drawing upon student diversity in the teaching/learning process has little effect on student outcomes" the difference was significant at the $p < .01$ level. On statement #121 "the primary responsibility for teachers in schools where inequalities of class, race and gender are severe is the teaching of basic skills" the difference was significant at the $p < .05$ level. This would seem to indicate that the beginning PDS mentors believed student diversity differences in race, class and gender are important factors in the educational process.

The decrease in the means over the year for the PDS mentors was significant at $p < .05$ on statement #124 "minority students come to school with cultural deficiencies" and #131 "it is hard for most teachers to meet the needs of different kinds of students". This indicates that the mentors came to believe that minority students don't have as many cultural deficiencies as they had previously thought and that it is not as hard for most teachers to meet the needs of different kinds of students as they had previously thought. On statement #127 "drawing upon student diversity in the teaching/learning process has little effect on student outcomes" the change was significant at the $p < .05$ level due to an increase in the mean score over the course of the year.

The difference between the means of the ending PDS mentors and the regular mentors was significant ($p < .05$) for statement #121, the same as it had been between the beginning PDS mentors and the regular mentors. Statement #129 "it is counterproductive for school faculty to make diversity a central part of their professional discourse," also showed a significant difference ($p < .05$) between ending PDS and regular mentors. It would seem that the few changes noted would more likely have arisen from specific experiences with diverse students over the course of the year than from any particular philosophy of the PDS program.

Discriminant analysis only extract a single function, separating he beginning PDS mentors from the end of the year PDS mentors ($p < .05$). Six of these questions provide insight into the function. Items # 129 "it is counterproductive for school faculty to make diversity a central part of their professional discourse", #131 "it is hard for most teachers to meet the needs of different kinds of students", #126 "Teachers should look beyond diversity for basic similarities", and #121 "the primary responsibility for teachers in schools where inequalities of class, race, and gender are severe is the teaching of basic skills" tend to identify the beginning of the year PDS mentors. Items # 128 "Drawing upon students' diverse backgrounds is only a marginally effective vehicle for transmitting knowledge" and #123 "An important task of schools is to build bridges between traditional school culture, the culture of students, and culture of the community" tend to identify with the end of the year PDS mentors.

Your Thoughts About New Teacher Preparation

Eighteen statements on the survey were about topics categorized as "Your thoughts about New Teacher Preparation". These addressed issues such as how student teachers should be evaluated, how much time they should spend teaching, other duties they should fulfill, who should decide the student teacher curriculum, and the job responsibilities of mentors. The respondents were supposed to rate their agreement with the statements on a scale from one to five with one being total disagreement and five being total agreement.

The beginning PDS students ($M = 2.20$) only differed significantly ($p < .05$) from the regular students ($M = 2.79$) on statement #144 "most student teachers are just non-paid servants for their mentor teachers." It appears that at the outset the PDS students did not perceive student teachers to be non-paid help as much as regular students perceived them to be.

Over the course of the year's experience the beginning PDS students significantly ($p < .01$) decreased their mean rating to statement #147 "student teachers do not get enough time in actual classrooms teaching" from 3.25 to 1.83. The same beginning PDS students significantly ($p < .05$) increased their mean over the year from 2.95 to 3.75 for statement #143 "college faculty do not truly know about the life of school, the day-to-day realities". It appears that the PDS students came to feel that they did get enough actual teaching time and that university faculty were not as cognizant of the realities of actual teaching as they had previously thought. These perspectives are in agreement with some of the PDS philosophies that propose to give the students more teaching time and the need to bring the university faculty more into contact with the realities of K-12 teaching.

The changes in beginning regular students' means to ending regular students' means were significant on six different statements. On statement #133 "future educators need to observe children in day care centers, playgrounds, in homes and in other settings outside of school," and #134 "the involvement of university faculty in actual school settings will help them teach prospective teachers more realistically" the beginning regular students significantly increased their means over the year. On statement #149 "student teachers bring new and creative ideas to the classroom" the beginning regular students increased their means over the year.

The beginning regular students' means decreased significantly ($p < .01$) over the year for statement #147 "student teachers do not get to spend enough time in actual classrooms teaching", from 3.62 to 2.00. This is almost exactly the same response pattern as seen in the PDS students. The beginning regular students had their means decrease significantly ($p < .05$) over the year for statement #137 "student teachers spend too much time in classrooms just sitting and observing" and increase significantly ($p < .05$) for #138 "teacher education has been as central to the mission of discipline-based secondary programs as to elementary programs". Generally the regular students demonstrated more change in their thoughts about new teacher preparation over the year than their PDS peers. This indicates that the change is the result of the specific setting of the student teaching experience and not any particular PDS philosophy. The ending PDS students had a significantly ($p < .05$) lower mean on statement #133 "future educators need to observe children

in day care centers, playgrounds, in homes and in other settings outside of school" than the regular students.

The beginning PDS mentors had higher means than the regular mentors on nine statements. On statement #134 "the involvement of university faculty in actual school settings will help them teach prospective teachers more realistically;" statement #137 "student teachers spend too much time in classrooms just sitting and observing;" and #147 "student teachers do not get to spend enough time in actual classrooms teaching " the difference was significant at the $p < .01$ level. These three topics where significant difference was noted between the two mentor groups are highly espoused tenets of the PDS philosophy.

On the remaining nine topics the difference between the higher regular mentors' means and the beginning PDS mentors' means was significant on three statements. On #144 "most student teachers are just non-paid servants for their mentor teachers," the difference was significant at $p < .01$. On statements #135 "student teachers should be evaluated using standardized testing" and #138 "teacher education has been as central to the mission of discipline-based secondary programs as to elementary programs" the difference was significant at $p < .05$.

The increase in the means of the beginning PDS mentors over the year was significant ($p < .05$) on three statements. Those statements were #144 "most student teachers are just non-paid servants for their mentor teachers"; #149 "student teachers bring new and creative ideas to the classroom"; and #150 "student teachers contribute in a positive way to their regular classrooms." The increase in the agreement with the concept that student teachers are just non-paid servants seemed odd in contrast with the increase in agreement with #144 and #149 which seemed to value the student teachers input. Perhaps the PDS mentors came to realize over the course of this experience that they should more highly value the ability of the student teachers and changes should be made.

The increase in the ending PDS mentors' means created a significant difference between them and the regular mentors on statement #149 "student teachers bring new and creative ideas to the classroom" and statement #150 "student teachers contribute in a positive way to their regular classrooms" at the $p < .01$ level. The difference between the ending PDS mentors' mean and the regular mentors' mean on statement #135 retained the same level of significance as between the beginning PDS mentors and the regular mentors discussed above. Generally the trend in the changes of the PDS mentor means over the year indicates that they developed a higher appreciation for the student teachers' and university faculty contributions. The ending PDS mentor means generally demonstrate a higher value for the PDS philosophy than the regular mentors.

Discriminant analysis identified three distinct functions from this section of questions. The first function separates beginning of the year PDS mentors from end of the year regular mentors, the second separates beginning of the year PDS students from end of the year PDS students, and the third separates beginning of the year regular students from end of the year regular students. All three functions were significant at the $p < .05$ level.

On the first function the beginning of the year PDS mentors were characterized by common responses on items # 147 "student teachers do not get to spend enough time in actual classrooms teaching", #134 "the involvement of university faculty in actual school settings will help them teach prospective teachers more realistically", and #133 "future educators need to observe children in day care centers, playgrounds, in homes and in other settings outside of school". The end of the year regular mentors, on the other hand, were characterized by similar responses to items #144 "most student teachers are just non-paid servants for their mentor teachers", #143 "college faculty do not truly know about the life of school, the day-to-day realities", #146 "Actual school teacher and administrator expertise and knowledge should control the teacher preparation program", and #135 "student teachers should be evaluated using standardized testing".

On the second function the beginning of the year PDS students provided similar responses to items #149 "student teachers bring new and creative ideas to the classroom", #134 "the involvement of university faculty in actual school settings will help them teach prospective teachers more realistically", # 147 "student teachers do not get to spend enough time in actual classrooms teaching", and #139 "student teachers should be evaluated using written projects, self-evaluations and personal reflections". The end of the year PDS students provided similar responses to items #150 "student teachers contribute in positive ways to their regular classrooms", #143 "College faculty do not truly know about the life of school, the day-to-day realities", #133 "future educators need to observe children in day care centers, playgrounds, in homes and in other settings outside of school", #138 "teacher education has been as central to the mission of discipline-based secondary programs as to elementary programs", and #148 "classroom teachers know little about how to properly mentor a new student teacher".

The third function provided differentiation between the beginning of the year regular students and the end of the year regular students. The beginning of the year regular schools were characterized by similar responses to items #147 "student teachers do not get to spend enough time in actual classrooms teaching", #137 "student teachers spend too much time in classrooms just sitting and observing", #136 "university expertise and knowledge should control the teacher preparation program", and #138 "teacher education has been as central to the mission of discipline-based secondary programs as to elementary programs". On the other hand the end of the year regular students had similar responses to items #145 "there is little incentive for existing teachers to mentor new student teachers", #146 "actual school teacher and administrator expertise and knowledge should control the teacher preparation program", #143 "college faculty do not truly know about the life of school, the day-to-day realities", and #149 "student teachers bring new and creative ideas to the classroom".

Results from the Faculty Interviews

In February 1996 interviews were conducted with the university faculty instructing the on-site methods classes, the Dean of the College of Education, the Chair of Curriculum and Instruction, and the Coordinator of Undergraduate Programs. The interviews followed a semi-structured format centered around the same thirteen questions (see the Appendix). A tape recording was made of each interview, this tape transcribed by an independent court reporter. The resulting

transcripts were then analyzed for both similarities in points of view and unique, yet interesting, individual differences. To protect the confidentiality of each person interviewed the names of the respondents have been removed from the following comments.

Each interview began with a request for the interviewees to identify themselves, and then to describe their roles in the PDS project from its inception through the end of the Fall, 1995 semester. One respondent described his involvement in the PDS project as a natural outgrowth from the other work the college has been doing to redesign teacher education. This effort, known as Project Apprendre, has included the promotion of a professional development school. Several respondents described the concept of a PDS as having found fertile ground in the Curriculum and Instruction department, as that department was having management problems placing the ever increasing numbers of student teachers in school districts for their student teaching experiences. Dr. Tom Ryan, the previous dean or the college, was credited by one respondent with having forwarded the idea of a professional development school at Illinois State University several years earlier. Another motivator seems to have been the recent NCATE review of ISU's programs, which cited the university as not having sufficiently strongly articulated partnerships with schools. One person just had an interest in the way ISU could deliver instruction with the most efficiency. Another felt that "Illinois State is the largest producer of teachers in Illinois; it's among the top ten to fifteen largest producers of teachers in the country. If there is an issue in teacher education that relates to the quality of the programs or quality of the universities, Illinois State better be testing it because we influence so many teachers that it would be ill-advised for us not to be paying attention to it."

The Wheeling school district was recounted as having had a good relationship with ISU, one that "could be built upon." Another faculty member recalls the Superintendent from District #21 stating that he saw their school as something of a teaching hospital. There were lots of ISU students whose homes were in the suburban areas, and several faculty felt that the Wheeling location just made a nice package for them to get their clinical methods classes in a school setting. One stated, "We did not have a set model in mind when we started, and, in fact, as we think about other sites for professional development schools, our hopes are that whatever that school culture is will guide the kind of professional development school that evolves."

Routine involvement in the professional development school project varied from faculty member to faculty member. During the Fall semester Dr. Fisher would teach a methods class in science for two, three-hour sessions on Monday and Tuesday of every other week. Dr. Ryan taught a methods class in social studies on the Monday and Tuesday of the off weeks. During the mornings on the days he was teaching methods classes he would visit the schools and in the evenings he would teach a graduate class. He was also involved in writing a grant proposal concerning the PDS. Dr. Lenski spent two days a week onsite supervising, meeting with district personnel, instructing in language arts and reading, and generally performing the duties of a communications liaison.

All three faculty reported that the classes offered in Wheeling were very similar in requirements and content to the courses taught on campus. One faculty member liked having to

only deal with one school's programs for a single group of thirty-two student teachers, as opposed to five or six different program from different districts for the same number of regular student teacher placements. What problems were cited most often were ascribed to planning and logistics, not a difference in philosophy. If a few cases, however, philosophy did differ between the university faculty and the practicing district teachers, " [the philosophy] wasn't always that clean ... this is where it always came apart. I would teach the students certain strategies that we know to be very effective in the *[topic omitted]* field and the teacher in school may or may not have heard of the strategy and may or may not be receptive to something new in the class."

Many different definitions were offered when the faculty were asked to describe a professional development school. One respondent saw a PDS as having four distinct missions: providing pre-service or undergraduate teacher preparation, providing university faculty with recency of experience in teaching students in the K-12 sector, developing a system to improve staff development for teachers and administrators in the cooperating school district and facilitating research in teaching and learning. Another defined a PDS as a place where teachers, and university people, and undergraduates all learn about education and all learn in different ways, where they all teach each other in different ways. "To me what makes a difference is if there's staff development happening in the schools and also if people are delivering instruction differently from how they would be delivering it on campus and finally if the university people are either conducting research or doing some kind of learning from their own personal end."

One faculty member saw a PDS as an integration of college and university course work with what's happening in the classroom. Another had a three-part definition which involved a formal agreement between a public school (or schools) and a university that permits the placement of student teachers within that district. This arrangement should also permit the provision of pedagogy courses and methods courses to be delivered during the time these students are participating in clinical experiences, and that it provide a recency, or currency of experience, to university education faculty who may have not been in schools for a long time. Said yet another faculty member, "It provides an opportunity for our faculty to get out among the troops."

In response to questions about how a PDS should benefit the participating ISU students, the faculty perceived that Wheeling would be closer to home for many suburban students and therefore cheaper, that it would consist of a more powerful curriculum, and that students would develop more sophistication in the practice of the students' chosen profession. It would also offer more learning, allow the students to hear and try concepts, and aid the students in landing a job.

As to what ISU, as an institution, and the individual ISU faculty gain from the experience, the responses included: an opportunity for research; recency of K-12 experience; including multi-age and multi-discipline exposure for all 32 students as opposed to perhaps only 9 in another program downstate; traditional placements; and being on the cutting edge was good for self esteem and public relations/image at a minimum cost. A disadvantage cited was the difficulty of delivery and instruction at such a distance.

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The most often mentioned benefits of the PDS program to the District #21 teachers and administrators were staff development program that are long-term, ongoing, systemic, at home and free of cost. However, several of the faculty had mentioned that, to the best of their knowledge, no one from ISU had yet to sit down with the Wheeling staff and develop a plan for implementing this part of the effort. Another advantage to Wheeling teachers and administrators was that they were able to have a group of students for an entire year. It was felt that these students would have more expertise and more experience, and would be individuals who could be genuinely more helpful in the classroom.

One interviewee discussed the possibility of District #21 teachers being hired to teach one or more of the university courses. "An example being this spring. We are hiring a second Wheeling teacher who will leave her classroom duties and for this semester will supervise and serve as a mentor to our undergraduates, a nice professional opportunity for this teacher. Some of those people will be hired, in fact, to deliver instruction. Next fall the languages course will be taught by one of the Wheeling people at no cost to us." Other respondents, however, had some reservations about this plan, wondering if the district teachers would be up on the latest theories and research to best carry out this university-level instructional responsibility. One wondered how the university maintains a sense of "ownership" in, and property over, the instruction if we were to have so little control in the instructional process.

One of the biggest advantages of the program cited by the faculty was having the students in the classroom to lend an extra set of hands to the regular classroom teacher. The PDS student teachers seemed to take on more responsibility, were more sophisticated and therefore a bigger help, allowed the mentor teachers to have release time to help kids that were having trouble, and provided another adult with whom the classroom students could bond. These factors combined to insure that there were more people engaged in being reflecting, instructing, assuring and reinforcing for each of the elementary classroom students. One faculty member said, "The ultimate test is the elementary students start referring to the university students interchangeably with the teacher. This occurred in many of the classrooms in Wheeling, so it's also the benefit that kids associated with positive adult people."

The response to a question about other benefits met with less consensus. One faculty member believed that the community benefitted from the influx of enthusiastic youngsters (the ISU students). Schools who can recruit our student teachers from the Wheeling experience, or who hear about the program and want to start their own PDS, and even the State Board of Education (who is thought to be promoting PDS's and could be used as a positive influence if this model is successful) were also named as potential beneficiaries of this program.

Possible drawbacks of the PDS effort include the expense of running the program. As one administrator stated, "Money is clearly an issue. Right now, the money's coming in, we've got $50,000 one year and $30,000 last year, we'll get a little extra money next year. If this money doesn't become a permanent part of the base, then the likelihood of these surviving is lessened, so the constant searching for monies is a drawback." Also mentioned was the need to recruit faculty who see participating in an off-campus PDS experience as part of their job. "It's harder on faculty

when they're away from campus, it's harder on tenure decisions; it's harder for them to participate in the work of the college, it's hard for them to be valued by the reward system that's institutionalized on the campus level." Environmentally it was felt that we need to consider the number of holidays that fall on Mondays, the fact that our students may be in a completely foreign environment and need additional help to acclimate, and the magnitude of the work that evolves out of the student's work with both the classroom teacher and the classes when compared to the classroom-only or field experiences-only work seen by a student on campus.

The faculty viewed the PDS as different from traditional student teaching programs in several ways. One was that the program links the public school as a more direct partner with the student teacher's education. The faculty was most enthusiastic about students having had experience with certain aspects of instruction (through their classroom observations) by the time they heard about them in the methods class and the ability to see firsthand what the methods' teachers lecture and reading were talking about (how these elements were actually accomplished in a real classroom). Related to this was the feeling that learning was more immediate, more immersed and that the student participants became stronger partners in the instructional role sooner. One District #21 teacher said, "we can't tell the ISU student teachers from our brand new teachers, and see, they're a year behind. When you can't tell them from one another, their demeanors and in their sense of responsibly, then that's a good thing."

When asked about the goals of the ISU-District #21 PDS project the general consensus was that there was no set model in mind. "We really have let the program evolve and as people have gotten together to plan, good ideas have been shared and we're tried them and I think that was the one stipulation when we started out with we're open to any kinds of suggestions (from) both sides." They hoped to create a better experience to connect the academic (university) side with the professional (K-12) side so the students would be more ready to be teachers, and, of course, help the students' chances of employment. For several of the ISU faculty the goals were that the PDS experience would create a chance for the ISU faculty to gain a better understanding of the problems of practice and improve the teacher education courses and ultimately research. The PDS program created good public relations material for ISU as the number one producer of teachers. It also provided the opportunity for offering off-campus, graduate-level credit producing possibilities. The Wheeling teachers and administrators had help at the school, access to bright, enthusiastic student teachers to add impetus for change, first examination of 32 students for future hiring needs and free, local graduate credit for their staff development. The Wheeling classroom students benefitted from the presence of a new teacher and a greater opportunity to reach their educational goals due to the increased attention.

The general feeling by the end of the first semester was that the PDS program had been a good experience. Each respondent felt that the group had all made a good stab at that first attempt and that the goals were being met realistically. The feedback from teachers and administrators at District #21 was likewise an overall sense of positiveness.

As part of the interview respondents were asked to tell us how much he or she liked or disliked particular aspects of the program and give a reason or two why that was the case. On the

subject of travel the answers were diverse. One person indicated that the traveling was not a bother while another indicated it meant not spending as much time on-site, either on campus or in the school. A distinction was made between the time it took to travel and the effect of the separation from campus. Some felt it was necessary to have a presence other than just in Central Illinois and that being up in Wheeling was just as easy as being down here.

Workload brought out a resounding "too much!" from those involved on a daily basis. The number of students per instructor was heavier than with a comparable on-campus course, and with more students expected in 1996-1997 academic year. One concerned faculty member stated, "The only way we see it next Fall is to have two half-classes that we will spend less time in the school and we will spend more time in the classroom, so there's a definite workload phenomenon that got to be addressed." Another said, "There was way too much work in developing this program, it took much more time than I anticipated." Another commented, "Wheeling adds to the workload because if it were just running regular student teachers that would be being managed primarily by someone else. Also I believe that there is the possibility for lots of error. I'm exercising a good deal more control than I might ordinarily be the case. That's time consuming."

For varied reasons the reaction of the faculty to the concept of the ISU student cohort group was a resounding "Yes!" One ISU instructor felt it allowed for an integration of two courses that, on campus, would have to be taught separately. The concept of a cohort offered a support system for the students. Although another respondent had no problem with the cohort concept, he did not see the it as a new phenomenon. "... cohorts have been around for a long time. I would say that at least this year, we made no unique advantage of that phenomena in the Wheeling program, we didn't do anything different in that respect than we did on campus." Cohort groups make the management process much easier, reducing the local demand for placements for student teaching and pre-clinical experiences.

Generally the comments about Wheeling's facilities and resources were: "great", "wonderful", and "fabulous". The few negatives that were voiced centered around the length of time it took to get the technology up and running -- about six months later than desired -- and acquiring resources such as construction paper, copying and scissors for certain student projects.

Communication with the ISU students drew mixed responses. As an example, "...e-mail was not up and running in a timely way for me to require that the students to send lesson plans and ask questions. Not a single staff member up there ever used e-mail and so that electronic communication never happened. We did not spend nearly enough time communicating, but that's all four of us, that's not just there -- even when we had the core program and the cohorts, the faculty did not team very well. There are going to have to be other mechanisms of communication." Another view was "... using Email quite a bit and reports that is keeping the communications up, a view not shared by all. *[Another faculty]* is also using Email and does not report communications problems. Now, student reports on communications are yet to be measured, but it may be that the students take a different view than the faculty, that they don't believe that there's as much communication as the faculty does."

Phases were another hot topic for the faculty respondents. One faculty remembers, "The phase phenomena last Spring that we talked about should have varying levels of responsibility and that in fact students could -- not at their own rate, but more at different rates, that conceivably some students could begin what we call student teaching by Thanksgiving, others might not begin until Valentine's day if they're really not ready -- we didn't implement that. That was not beyond our control, there were just too many variables to take care of, so moving from site to site is great, the phase is something we have to consider in the future and see if we can work out the details." Generally everyone felt that phases were a good idea but that too many were attempted too soon, without adequate experience in how phases would work. Another voiced a common feeling, "One of the problems with the phases, and this has been a problem that surfaced from the very beginning that never does get put to rest and that is that we're trying to do too many things with the students, too much time in classroom and not enough time in formal instruction because they're treating the students in the Fall as traditional student teachers is an issue that we cannot get killed and so there is too much of an expectation that students will spend too much time in classrooms absent from focusing on something they're doing for their (methods) class, too much what you'd think of as student teaching time."

Everyone felt the ISU students were a good group of students -- not necessarily the best but also not the worst. The description from one faculty went as follows: "They -- well, they were not just college students, they were beginning to be teachers, and a person who is a teacher has -- is looking at the world a little differently, actually -- you're just not going to class to think about how you can get through these assignments or get through your grade, you're looking at how to actually do a good job teaching kids, and the students, these particular ISU students, most of them rose to the occasion and did a really good job starting to make that transfer from being a student who just learns it or doesn't learn it to being a teacher who really needs to learn things."

The opportunity for research seemed abundant. One faculty member expressed an interest in some work on the topic of staff development. Another had the following ideas already in place, "Well, I think how I described how I did innovative teaching. For research, I did a few things, I instituted this observe teaching experience which I'm going to be hoping to present and to write up, as a new type of model for teaching people how to teach literacy. I also have the students delineate their beliefs and practices and where they got this information, from one of the projects that I had them do, so people tend to think that -- or -- the research seems to indicate from what I know that teachers teach either the way they were taught when they were young or what they see teachers do and I think that may not be the case and some of the data that I've collected, I'm hoping, will indicate otherwise, so I did those two things the first semester. This semester -- and I also had the students in one of their teaching assignments to work on one of their particular kinds of teaching lessons and for the second semester I'm going to be continuing a research project and have the student teachers do the teaching on these kinds of lessons and they're going to do some coding of student responses, so I have another research project going second semester."

The list of recommendations for future years was lengthy. The most cited improvements included: improving the methods and frequency of communications, expanding the research dimensions, listening to the feedback from the pre-service teachers, and making the classes more

structured. One faculty member added, "I rather suspect that the expectations that we as instructors have for the students will change. I know from my personal look at the situation, the relationship that we've established with the teachers will allow us to make requests that we didn't make this past year. I think I'm in a position now to say to classroom teachers, I'd really like to have this student have the opportunity to teach a [particular] lesson during the second week of school, can we run that into the program somehow. Whereas last year, we were waiting to see, you know, what their curriculum was like, what their plan of action was and we were kind of going slow about what we would ask them to do, so I think those kinds of changes will affect the program fairly dramatically. We know their curriculum now a lot better than we knew it in the Fall."

Another member of the participating faculty opined, "I don't think I can speak to the day-to-day improvement for Wheeling. I'll be really interested in the results of our research study, particularly what it shows in the second year. For example, one of the research questions that I'm most interested in is how our first-year teachers who have had the Wheeling experience compare with similar students who haven't. I mean, is all this worth it? Have we, in fact, changed the way they're inducted, prepared, to what extent does this last? I mean, you know, is it something that's an inoculation for a couple of years and is it worth it? Is all this worth it? Have we made a difference? That's the enduring question.

A final comment from one of the faculty seemed to echo a feeling from the entire group. "This is not a [true] PDS and everybody here knows it, but the philosophy is if you call it a PDS, maybe somebody will believe it." There is a shared belief that, given enough time and continued interest, this program will evolve into an organization that does more closely resemble the basic tenants of the Holmes Group PDS.

Results from the Feedback Forms, Observations and Interviews

The research effort also included the analysis of an open-ended written survey sent to all of the students, both PDS participants and those in the regular program, and an analysis of notes taken from several on-site observations, individual and group interviews conducted throughout the year. Included with the spring survey were three open-ended questions addressing what each liked MOST about his/her teacher preparation and student teaching experience; what each liked LEAST and recommendations each might have for improvement of the program or experience. These data were analyzed in using a method very similar to that employed for the faculty semi-structured interviews with the added component that, since these data were less formal and structured, additional effort had to be invested to extract similarities, differences, and uniqueness.

Ninety percent of the PDS respondents cited having an entire year in the classroom and getting to see and be involved in the entire teaching process, including parent-teacher conferences, classroom parties and particularly the growth of their students as the things they liked most about their PDS experience. As one of the PDS student teachers put it, "I saw these kids grow and excel in school and as people. I also grew along with them."

In close alignment with that choice 25% of the PDS students liked their mentor teachers' examples and guidance; 25% listed the seminars and workshops that they were allowed to attend with the "regular" on-staff teachers; 25% listed the variety of different subjects, grade levels and methods they were able to observe and experience; 14% listed having the methods classes so closely related to the actual observation experience in the Fall; and 17% listed the feeling of really "being a teacher" and the confidence they derived from being more thoroughly prepared due to this experience. In the words of one PDS student, "I felt very comfortable when it was time for my takeover since I had been in the classroom all year." Another stated, "I have received exposure and experience in all aspects of a teacher's job and I feel very prepared for my own classroom in the fall!"

Other responses of note included: the enjoyment of the children and the hands-on experience with the classes; having a cohort group with which to relate throughout the year; and the advantage the PDS students felt that the PDS experience gave them in finding a job for next year. "The schools I have spoken with are excited to see such a wide variety of classroom experiences. I feel this program has given me an inside track in the search for employment." One student teacher summed it up by stating, "The regular program may teach you <u>how</u> to teach, but the PDS teaches you how to <u>be</u> a teacher."

In response to the same question about their teacher preparation and student teaching experience, the traditional student teachers were much less verbose. Forty-four percent liked the examples set by their mentor teachers and the relationships they formed with them. Other items cited ranged from the classroom children and the variety of experience to the closeness gained from sharing this experience with other student teachers, the guidance of supervisors and professors, the multicultural environment, and those aspects of teaching that one cannot learn from a textbook. For example, according to one regular student teacher, "I learned <u>a lot</u> more about teaching that they do not tell you about in *[the university]* class, that are equally as important as the classes. For example, how to plan the time for a lesson, behavior management, how to deal with parents, etc."

The PDS student teachers were unanimous in that they least liked the lack of communication between themselves and the ISU professors, and the lack of communication they perceived that did not occur between the ISU professors and the District #21 teachers. One statement captured the general sentiment, "I didn't feel that there was enough communication between staff members, student-teachers and ISU professors. I think everyone needs to sit down at the beginning of the year and make out a goal sheet." Related to this comment were complaints about scheduling problems and, particularly for those student teachers in the middle school, the fact that they often missed their own afternoon students because they themselves had to attend classes and meetings: "Schedules constantly changed and the ISU professors didn't communicate with one another or with the Wheeling staff which made it difficult."

Another unanimous grievance expressed by the PDS students concerned the homework for the methods classes. Of special note were the heavy requirements due at the very end of the Fall semester. It was felt that these assignments would be better accomplished if they could be spaced

throughout the semester. Several PDS students felt having all of that work due at once brought unnecessary stress upon the students, and that this stress was aggravated due to a lack of planning and communication on the part of the ISU professors.

Another comment from many of the PDS students concerned the last phase of the clinical experience in the Fall semester. The consensus among the respondents was that this experience it was too short, and too late in the semester, to be of any value.

Several unique comments were offered by the PDS students. These tended to center about the District #21 mentor teachers not being aware of the difference between a clinical student (during the Fall semester) and a regular student teacher (during the Spring semester). Another piece of feedback involved the lack of on-site ISU supervisors and lack of resources such as library.

Several diffuse comments about the least favorite aspects of their program were shared by the traditional student teachers. These included: apparent favoritism shown by the ISU professors to certain students and/or mentor teachers, politics of the college interfering with courses and placements, some mentor teachers not wanting student teachers, and the impracticality of certain methods and/or seminar lessons. As one traditional student put it, "...the professors would present you with the ideal way to approach a lesson or student or the ideal way to deal with a problem, when in practice it was the most impractical way to deal with something."

Traditional students were extremely diverse in their comments about the items they least liked about their teacher preparation and student teaching experience. While 22% felt that too many clinical hours were required, 11% thought not enough hours were required during clinicals. Unique comments covered the spectrum from a lack of flexibility on the part of the Curriculum and Instruction faculty toward the areas of specialization, to the volumes of paperwork required of the student teachers: time sheets, progress reports, lesson plans, journals and portfolios; from the need for more time with the children, to the extended length of ISU's student teaching experience compared to surrounding university requirements and to the lack of communication between ISU professors, the host schools, the student teachers and the supervising teachers.

Fifty-nine percent of the PDS student teachers recommended better communications between the ISU faculty, the coordinating teachers, and interns as a way to improve the experience in the future. Along those same lines, 41% indicated more scheduling information and goal planning was needed, especially with regard to the timing of the assignments for the methods classes. In the words of one student, "Plan classes better! ISU professors need to communicate with each other. Expectations, due dates, instructions and requirements need to be fully explained ahead of time". Another felt that the faculty need to "have a set calendar for the semester. Have professors from ISU work together." Thirty-five percent also listed a desire for less phases in the clinicals, stating that the small amount of time in the latter allowed little to no benefit.

Unique items mentioned included: employing supervisors who were closer to the Wheeling District and having the same supervisor throughout the year for continuity; having Bruce Johnson and ISU people put into the program earlier; having more cohort bonding activities earlier in the

year and more lunch dialogues; needing a better orientation on the cultures of the different schools. Students also expressed a need for more ISU library days the first semester, more pertinent seminars and more hands-on technology experience, having each student teacher participate in a mock interview, being observed for more than 15 minutes during the first semester, and having letters of recommendation go out much earlier.

The list of recommended improvements from students in the traditional program was even more diverse, having virtually no consensus. One recommendation was to rearrange the core classes so all semesters were equally challenging. Core III was considered a "blow-off" compared to I and II. Another recommendation was for practice in preparing a week-long unit. One regular student cited the need to stress that teaching requires work and dedication beyond the typical school day. Another felt that more preparation for classroom expectations was needed, while yet another student thought the student teachers should be out in the schools and participating with real teachers and students as soon as possible.

It was felt that the projects for the methods classes should include more practical exercises that can be later used in their classrooms; that portfolios are a joke and, if they're going to be required, someone should make sure that all instructors can answer questions on them. Another recommendation was to end the journal requirement. One request was for more multicultural exposure while another was for clinical time to be scheduled in blocks. A very specific recommendation stated, "the junior high/middle school Curriculum and Instruction classes need to be revamped. In essence I feel like I took the same class eight different times. There were no major differences in content or projects between courses. Instructors need to COMMUNICATE to ensure they are not teaching the exact same unit with the exact same notes as a colleague."

Summary

Overall, the ISU-District #21 PDS effort of 1995-1996 appears to have been a success. Students and mentor teachers participating in the PDS reported opinions very similar to those reported by students and teachers participating in the traditional program. Significant differences could, in most cases, are highly suggestive of important elements attempted in the PDS effort. Participating ISU faculty also regarded the program quite highly, and open-ended comments from all of the participants have described several benefits not found in the traditional model.

Two important issues remain to be considered. The first, and perhaps the easier of the two, addresses the longer-term impact PDS participation has had on the 32 students. Do these students have an easier time securing employment, acculturating to their new schools, and succeeding as first-year teachers when compared to their traditional program counterparts? Understanding the residual impact of the PDS effort after the students have graduated is important to both improving the program in future years and continuing and expanding the program in other school districts. The Technological Innovations in Educational Research laboratory will be investigating these questions over the course of the next year.

A second issue concerns what improvements can be made to the program as a result of the findings from this first year of effort and research. Several points have clearly emerged as issues that need to be addressed by faculty and administrators as the program is continued:

1. The distance, and travel time, between the university and the district.
   This is a concern to both the participating ISU faculty and the affected students. Faculty, although generally supportive of off-campus instruction, view travel as waste of precious time. Students, who might only see a faculty member once or twice every week or two, need to have means for asking questions and resolving problems in a more timely fashion. While a resolution for this issue might involve selecting districts that are closer geographically to the university for future PDS implementations it does not rule out participating with districts that are further away. Creative means of instruction, perhaps involving the use of distance education technologies and e-mail and the Internet, can be applied to reduce the need for travel and to increase the frequency of interactivity.

2. Coordination among university faculty and district teachers.
   A PDS, at least that envisioned by the Holmes Group, is not a one-way exchange. Information and experience is supposed to flow from the university to the district as well as from the district to the university. Most of the coordination this first year was concerned with scheduling and planning. Now that a model has been established coordination activities can shift to the more substantial elements of integrating district classroom and university classroom practices. For example, district personnel can be engaged to teach university courses while university faculty participate in greater numbers of classroom-based experiences. Care and planning need to be exercised, however, to insure that the two-way street is really constructed, and that university responsibilities are not merely shifted to the location of the district.

3. Continued support and participation.
   The first year of any effort is always the most tenuous, and is rarely the best indicator of the potential of a new program. Some practitioners, in fact, believe that it is not until the sixth year that a new program can finally be judged for its own merits. If the university-district collaboration embodied in this PDS is to fully mature it must be continued and encouraged to develop. Both the university and the district must be willing to allocate the necessary facility, personnel, and other fiscal resources to make this happen. The long-term effects of the PDS program on student job placement and career retention must also be examined. Otherwise, easier and less costly means will be used at the expense of a teacher preparation strategy that could have much more far reaching benefits.

This first year of the ISU-District #21 professional development school has been a learning experience for all of the participants. It has been a successful experience, and one that can serve as the seed of substantive change for the entire college.

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Tables and Appendices

The following abbreviations are used in these tables:

BPS and **Beg PDS Stud** Beginning of the year response from PDS students
EPS and **End PDS Stud** End of the year response from PDS students
BRS and **Beg Reg Stud** Beginning of the year response from regular students
ERS and **End Reg Stud** End of the year response from regular students
BPM and **Beg PDS Men** Beginning of the year response from PDS mentor teachers
EPM and **End PDS Men** End of the year response from PDS mentor teachers
RM and **Reg Men** Response from regular mentor teachers (end of the year only)

Table 1 Your Understanding of Selected Topics Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
1. I understand something about standard English grammar	3.73	4.00	3.85	4.00	4.23	4.20	4.10
2. I understand something about listening skills	3.86	4.00	3.99	4.27	4.23	4.10	4.10
3. I understand something about speaking skills	3.77	4.00	3.92	4.09	4.18	4.02	4.00
4. I understand something about informal writing	3.86	4.08	3.93	4.27	4.20	4.15	4.09
5. I understand something about process writing	3.50	4.33	3.57	4.09	4.20	4.17	3.85
6. I understand something about spelling	4.00	4.08	4.03	3.91	4.18	4.12	4.21
7. I understand something about punctuation	3.59	4.00	3.81	4.00	4.20	4.12	4.08
8. I understand something about handwriting	3.82	3.92	3.77	4.18	4.35	4.20	4.13
9. I understand something about integrating language arts	3.59	4.08	3.62	4.18	4.12	4.07	4.07
10. I understand something about writing assessment	2.86	3.83	3.21	3.73	3.86	3.98	3.72
11. I understand something about methods of grouping	3.27	4.08	3.53	3.82	4.11	3.90	3.79
12. I understand something about holistic assessment	2.59	3.25	2.71	3.91	3.74	3.78	3.22
13. I understand something about silent sustained reading	3.73	4.33	3.82	4.09	4.23	4.27	4.20
14. I understand something about phonics	3.32	3.75	3.14	3.36	4.05	3.95	3.91
15. I understand something about oral reading	3.91	4.00	3.81	3.91	4.26	4.00	4.15
16. I understand something about comprehension strategies	3.00	3.75	3.18	3.45	4.07	3.95	3.94
17. I understand something about vocabulary strategies	3.09	3.83	3.17	3.45	4.11	3.98	3.91
18. I understand something about content area reading	3.14	3.75	3.29	4.09	4.09	4.03	3.80
19. I understand something about word identification	3.27	3.58	3.29	3.64	4.05	3.88	3.92
20. I understand something about emergent literacy skills	2.86	3.17	3.17	3.64	3.67	3.78	3.56

1 = I understand **nothing** about ..., **2** = I understand **very little** about ..., **3** = I understand **something** about ..., **4** = I understand **a lot** about ..., **5** = I understand **everything** about ...

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Table 2 Your Comfort with Selected Topics Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
21. I would feel adequate teaching standard English grammar	3.73	4.75	3.63	3.91	4.57	4.59	4.31
22. I would feel adequate teaching listening skills	3.91	4.67	3.99	4.27	4.63	4.66	4.43
23. I would feel adequate teaching speaking skills	3.82	4.67	3.93	4.27	4.53	4.59	4.18
24. I would feel adequate teaching informal writing	4.00	4.92	4.02	4.55	4.48	4.70	4.31
25. I would feel adequate teaching process writing	3.45	4.75	3.52	4.27	4.44	4.65	4.08
26. I would feel adequate teaching spelling	4.41	4.92	4.25	4.18	4.60	4.73	4.55
27. I would feel adequate teaching punctuation	3.82	4.67	3.88	4.27	4.53	4.64	4.38
28. I would feel adequate teaching handwriting	4.00	4.50	3.82	4.36	4.60	4.68	4.40
29. I would feel adequate teaching integrating language arts	3.86	4.83	3.76	4.18	4.58	4.62	4.42
30. I would feel adequate teaching writing assessment	2.95	4.50	3.30	3.73	4.05	4.30	3.88
31. I would feel adequate teaching methods of grouping	3.18	4.67	3.42	3.82	4.33	4.43	4.02
32. I would feel adequate teaching holistic assessment	2.36	4.45	2.68	3.64	3.82	4.00	3.36
33. I would feel adequate teaching silent sustained reading	4.18	5.00	4.10	4.09	4.56	4.70	4.44
34. I would feel adequate teaching phonics	3.73	4.50	3.31	3.27	4.33	4.39	4.21
35. I would feel adequate teaching oral reading	4.27	4.83	3.98	4.09	4.53	4.50	4.57
36. I would feel adequate teaching comprehension strategies	3.45	4.75	3.32	3.73	4.49	4.62	4.34
37. I would feel adequate teaching vocabulary strategies	3.36	4.67	3.43	3.91	4.43	4.58	4.33
38. I would feel adequate teaching content area reading	3.32	4.58	3.43	4.18	4.40	4.64	4.28
39. I would feel adequate teaching word identification	3.27	4.50	3.49	3.82	4.29	4.54	4.32
40. I would feel adequate teaching emergent literacy skills	2.95	4.08	3.19	3.55	3.91	4.25	3.78

1 = I would feel **very uncomfortable** teaching ..., **2** = I would feel **somewhat uncomfortable** teaching ..., **3** = I would feel **adequate** teaching ...,
4 = I would feel **somewhat comfortable** teaching ..., **5** = I would feel **very comfortable** teaching ...

Table 3 What makes a Masterful Teacher? Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
41. Masterful teachers develop special ways to listen to their students.	4.14	4.73	4.41	5.00	4.83	4.79	4.72
42. Masterful teachers do not often think about their teaching.	1.59	1.50	1.39	1.09	1.40	1.15	1.27
43. A masterful teacher understands what factors motivate students to study.	4.55	4.67	4.41	5.00	4.71	4.53	4.55
44. Whether the principal thinks there is too much noise in his or her classroom would tend to worry a masterful teacher.	2.41	2.64	2.33	2.36	2.24	1.98	2.39
45. Masterful teachers know that the process of understanding and improving one's teaching must start with reflection upon one's own experience.	4.41	4.55	4.55	4.64	4.79	4.78	4.61
46. A masterful teacher continuously seeks new ways for students to learn subject matter.	4.77	4.92	4.71	5.00	4.90	5.00	4.87
47. A masterful teacher thinks that increasing students' feelings of accomplishment is not important – how much the student learns is what matters.	1.91	1.42	1.66	1.27	1.44	1.41	1.30
48. A masterful teacher is challenged to motivate students.	4.23	4.25	4.64	4.91	4.88	4.56	4.71
49. Masterful teachers want to help students to value learning.	4.67	4.92	4.78	5.00	4.95	4.95	4.88
50. Masterful teachers are not concerned that all students reach their maximum potential.	1.41	1.75	1.42	1.36	1.12	1.40	1.24
51. Master teachers see each student as an individual, not as a mass, a group, or a class.	4.18	4.83	4.57	4.73	4.86	4.68	4.84
52. Peer coaching and collegial relationships detract from masterful teaching.	2.00	1.67	1.61	1.18	1.18	1.34	1.31
53. Masterful teachers are concerned with learning style.	4.09	4.83	4.11	4.55	4.77	4.66	4.40
54. Masterful teachers are prescriptive with student assignments.	3.27	3.33	3.38	3.00	4.07	3.98	3.98
55. Masterful teachers are demanding, with high expectations based on individual ability.	4.09	3.83	3.72	4.18	4.27	4.41	4.34
56. Masterful teachers are concerned with grade-level standards.	3.32	3.33	2.93	2.82	3.43	3.61	3.71
57. Masterful teachers are authoritative in order to reach group objectives.	2.90	2.33	2.58	2.45	2.55	2.66	2.66
58. Masterful teachers are not concerned with grade-level curriculum.	2.05	2.50	2.45	1.91	1.88	1.93	1.77
59. Masterful teachers are highly structured and lesson-plan oriented.	2.81	2.82	2.90	3.36	2.84	2.95	2.80
60. A masterful teacher is not concerned with order and discipline.	1.68	2.00	1.53	1.09	1.39	1.61	1.37

1 = Disagree ..... 5 = Agree

Table 4 What Makes an Exemplary School? Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
61. An exemplary school values each student as a member in a community of learners.	4.86	5.00	4.72	4.64	5.00	4.88	4.92
62. Curricula and departmental organization are unchanged in an exemplary school.	1.52	2.08	1.75	1.18	1.23	1.51	1.46
63. Exemplary schools rarely provide venues for new teacher development or the continuing professional development of veteran teachers.	2.19	1.17	1.80	1.09	1.27	1.68	1.28
64. Classroom-oriented educational research should be conducted in exemplary schools.	4.19	3.91	3.71	4.18	4.05	3.59	3.47
65. Principals in exemplary schools work hard to keep their staff alive and growing.	4.71	4.50	4.51	4.55	4.88	4.76	4.64
66. The culture of the exemplary school is "ready, fire, aim."	2.38	2.25	2.61	2.55	1.94	2.20	2.14
67. Exemplary schools allow teachers time to reflect upon effective practice.	4.33	4.25	4.20	4.64	4.79	4.63	4.55
68. Teachers in an exemplary school frequently raise questions about professional practice and often think about ways to change.	4.71	4.42	4.25	4.73	4.68	4.71	4.58
69. An exemplary school's faculty rarely raise questions about the school's organization.	1.90	1.67	1.93	1.64	1.14	1.61	1.63
70. A school becomes an exemplary school because it is able to establish a set instructional routine with a curriculum that is demanding and inflexible.	1.43	1.33	1.75	1.45	1.18	1.20	1.49
71. Exemplary schools have many non-instructional duties for teachers.	3.05	3.00	3.12	3.00	1.61	2.59	2.30
72. In an exemplary school a teacher's job consists of transmitting basic information.	2.05	2.17	2.20	2.00	1.57	2.05	2.01
73. The communication among teachers in an exemplary school is open and candid.	4.33	4.33	4.16	4.73	4.74	4.73	4.52
74. Responsibilities of school faculty in an exemplary school include the development of new forms of school organization and new ways of scheduling the school day.	4.29	4.25	3.74	4.27	4.20	4.15	4.04
75. Competition among exemplary school teachers is a step in developing collegiality.	2.62	2.58	2.08	1.91	1.48	2.28	1.71
76. In an exemplary school the business of teaching children is paramount.	4.29	4.50	4.05	4.00	4.80	4.48	4.64
77. Exemplary schools take the time to learn why some students progress slower.	4.67	4.67	4.37	4.73	4.63	4.66	4.60
78. In an exemplary school diagnosing student learning problems is left to the experts.	1.71	1.73	2.30	2.36	2.14	1.85	1.73
79. In an exemplary school treating student learning disabilities is left to the experts.	1.90	1.75	2.13	1.64	1.50	1.56	1.67
80. Part of the job of a teacher in an exemplary school is to guide students towards intellectual and emotional growth.	4.86	4.67	4.69	5.00	4.93	4.73	4.80

1 = Disagree ..... 5 = Agree

Table 5 Your Thoughts About Teaching and Learning Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
81. Involving students in problem-solving better prepares them for today's workplace.	4.90	4.67	4.70	4.91	4.98	4.85	4.80
82. Students need more time in drill and practice learning basic skills and concepts.	2.57	3.17	2.54	2.73	3.43	2.98	3.01
83. Creating stronger linkages between schools and the outside world helps students see connections between school work and the real world.	4.86	4.75	4.76	4.91	4.84	4.80	4.80
84. Student learning that incorporates personal initiative and democratic problem solving are educational frills, not too useful in today's workplace.	1.24	1.33	1.56	1.18	1.10	1.40	1.32
85. Active student participation and directed discussion creates a classroom in which everyone learns from one another.	4.71	4.83	4.74	4.82	4.95	4.78	4.78
86. Children with special needs should be included in regular classrooms.	4.10	4.42	4.00	4.18	3.63	4.00	3.68
87. Class morale and learning improve when students are involved in making decisions about activities in the classroom.	4.65	4.50	4.76	4.91	4.74	4.75	4.67
88. Reflection and varied teaching methods are best suited for more advanced students.	1.95	2.33	2.41	2.00	1.62	1.87	1.97
89. Teachers cannot adapt themselves to the different needs of all students.	1.52	1.58	2.03	1.36	1.53	1.43	1.66
90. Team teaching provides a great support network.	4.52	4.75	4.34	4.64	4.81	4.75	4.72
91. Cultural background is the major force that shapes learning.	2.90	3.00	2.92	3.36	2.39	2.60	2.90
92. Students should be able to apply what they learn.	4.85	4.75	4.75	4.64	4.85	4.87	4.77
93. Poor instruction is primarily responsible for low student achievement.	2.67	2.50	2.77	2.55	1.62	2.05	2.15
94. Socialization is the most important aspect of the educational process.	3.05	3.00	3.13	3.00	2.61	2.54	2.49
95. The classroom teacher is the primary influence on student learning.	3.60	3.25	3.49	3.73	3.05	3.20	3.58
96. The core body of content is the most important aspect of the educational process.	2.95	2.58	2.82	2.55	2.27	2.42	2.71
97. Cooperative learning activities meet the needs of individual youngsters.	3.81	3.33	3.84	3.73	3.60	3.73	3.69
98. Class should be fun for students, even if some learning is sacrificed.	2.95	2.83	3.01	2.73	2.79	2.75	2.58
99. Making decisions cooperatively helps build student confidence.	4.45	4.25	4.45	4.55	4.36	4.66	4.42
100. Teachers are storehouses of knowledge which they pass along to children.	3.05	3.00	3.32	3.18	2.74	2.95	3.24

1 = Disagree ..... 5 = Agree

Table 6 Your Thoughts About Things that Influence Teaching Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
101. Most teachers have too many students in their classes.	3.19	3.58	3.98	4.27	3.36	3.56	4.12
102. Classroom teachers usually receive inadequate assistance from specialized teachers.	2.52	3.08	3.00	3.64	2.68	2.54	3.04
103. There is insufficient clerical help for teachers.	2.67	2.67	3.18	3.55	3.86	3.76	3.64
104. Teachers have more than enough time for class preparation and rest between classes.	2.14	2.42	1.94	2.00	1.80	2.12	1.57
105. Teachers have too little control over the curriculum.	3.00	3.00	3.26	3.45	2.68	2.93	2.94
106. It is essential that all schools be equal in their educational opportunities.	3.57	3.83	3.91	3.91	3.64	3.80	3.75
107. Teachers are required to meet too many standards and regulations.	3.14	2.75	3.07	2.82	3.66	3.43	3.15
108. Instruction and testing designed and recommended by recognized experts should remain the central element of education reform.	2.29	2.33	2.30	1.73	1.52	2.00	1.74
109. Teachers do not have sufficient time to think and plan.	3.00	3.00	3.15	3.45	4.14	3.73	3.99
110. Teachers who reflect and raise questions about their practice can change schooling.	4.00	3.83	3.88	4.27	4.23	3.98	3.92
111. The educational system will be invigorated only if democratic styles of management are adopted.	3.05	3.08	3.13	3.09	3.13	3.56	2.93
112. Teaching changes as a result of systematic inquiry about teaching and learning.	3.86	3.50	3.88	4.09	4.00	4.18	3.89
113. Recommendations of expert consultants are better suited for improving practice than school faculty recommendations.	2.05	2.25	2.29	2.00	1.48	1.83	1.74
114. Research, as a process, is not well suited as a means to improve and refine the responsiveness of teachers to student differences.	3.00	2.67	2.72	2.55	2.62	2.77	2.65
115. To improve instruction schools need to be reorganized to balance the individual work of a single teacher with the collaborative work of many teachers together.	3.62	3.67	3.82	4.09	3.95	3.85	3.73
116. The instructional routine in most schools is too rigid.	2.95	2.58	3.06	3.18	2.91	2.78	2.64
117. Student teachers can contribute to restructuring efforts.	4.38	4.25	3.97	4.45	3.93	4.24	3.58
118. The curriculum in most schools is too inflexible.	2.62	2.75	3.30	3.36	2.95	2.88	2.93
119. Schools and universities should jointly assume responsibility for restructuring.	4.24	3.83	3.79	4.36	3.86	4.05	3.52
120. In most schools testing and grading procedures need to be improved.	3.95	3.92	4.01	4.45	4.30	3.88	3.88

1 = Disagree ..... 5 = Agree

Table 7 Your Thoughts About Diversity Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
121. The primary responsibility for teachers in schools where inequalities of class, race, and gender are severe is the teaching of basic skills.	3.00	2.83	2.45	2.40	2.20	2.15	2.71
122. To be effective, a teacher must share a common culture and social outlook with his/her students.	2.81	2.33	2.45	2.09	1.66	2.00	1.94
123. An important task of schools is to build bridges between traditional school culture, the culture of students, and culture of the community.	4.62	4.17	4.50	4.91	4.43	4.46	4.36
124. Minority students come to school with cultural deficiencies.	2.67	2.42	2.54	1.64	3.16	2.45	2.73
125. Society plays a significant role in creating & maintaining differences in achievement.	3.95	3.58	4.04	4.36	4.14	3.85	3.88
126. Teachers should look beyond diversity for basic similarities.	4.24	3.92	4.01	4.00	4.32	4.12	4.18
127. Drawing upon student diversity in the teaching/learning process has little effect on student outcomes.	1.71	2.17	2.03	1.73	1.41	1.85	1.90
128. Drawing upon students' diverse backgrounds is only a marginally effective vehicle for transmitting knowledge.	2.29	2.33	2.36	1.82	2.07	2.13	2.11
129. It is counterproductive for school faculty to make diversity a central part of their professional discourse.	2.19	2.67	2.29	2.18	1.95	1.79	2.28
130. The context of schooling, the work conditions facing teachers and the social context of the U.S. society are mainly responsible for creating and maintaining low achievement for diverse student learners.	3.05	2.67	3.04	3.50	3.15	2.85	2.96
131. It is hard for most teachers to meet the needs of different kinds of students.	3.33	2.58	3.34	3.45	3.39	2.78	3.06
132. Teachers need to understand the psychological and cultural differences that underlie the diverse backgrounds of students in their classes.	4.38	4.17	4.42	4.82	4.45	4.58	4.40

1 = Disagree ..... 5 = Agree

Table 8 Your Thoughts About New Teacher Preparation Mean Scores by Respondent Group	Beg PDS Stud	End PDS Stud	Beg Reg Stud	End Reg Stud	Beg PDS Men	End PDS Men	Reg Men
133. Future educators need to observe children in day care centers, playgrounds, in homes and in other settings outside of school.	4.10	4.17	4.27	4.82	4.15	3.97	3.93
134. The involvement of university faculty in actual school settings will help them teach prospective teachers more realistically.	4.60	4.33	4.35	4.82	4.83	4.62	4.45
135. Student teachers should be evaluated using standardized testing.	1.30	1.33	1.54	1.36	1.34	1.38	1.70
136. University expertise and knowledge should control the teacher preparation program.	2.20	2.25	2.52	2.20	1.93	1.92	2.17
137. Student teachers spend too much time in classrooms just sitting and observing.	3.00	2.50	3.41	2.18	3.07	2.59	2.34
138. Teacher education has been as central to the mission of discipline-based secondary programs as to elementary programs.	3.00	3.33	3.18	3.09	2.60	3.03	2.97
139. Student teachers should be evaluated using written projects, self-evaluations and personal reflections.	4.15	4.00	3.89	4.00	4.17	4.05	3.87
140. Student teachers need to be allowed to reach into themselves to invent, enact and analyze tasks by which children learn.	4.40	4.67	4.49	4.45	4.59	4.47	4.37
141. Student teachers should follow a prescribed set of classroom rules.	2.80	2.75	2.88	3.00	3.24	3.05	3.07
142. Teachers who mentor new student teachers are the best in their profession.	2.50	3.00	2.78	2.64	3.07	3.22	3.10
143. College faculty do not truly know about the life of school, the day-to-day realities.	2.95	3.75	3.08	3.36	3.75	3.70	3.73
144. Most student teachers are just non-paid servants for their mentor teachers.	2.20	2.17	2.79	2.27	1.18	1.57	1.60
145. There is little incentive for existing teachers to mentor new student teachers.	2.50	2.58	2.70	2.82	3.15	2.95	2.89
146. Actual school teacher and administrator expertise and knowledge should control the teacher preparation program.	2.90	3.08	3.30	3.45	3.18	3.39	3.26
147. Student teachers do not get to spend enough time in actual classrooms teaching.	3.25	1.83	3.62	2.00	3.15	2.92	2.39
148. Classroom teachers know little about how to properly mentor a new student teacher.	2.80	3.17	2.73	2.36	2.27	2.11	2.37
149. Student teachers bring new and creative ideas to the classroom.	4.50	4.67	4.51	4.82	4.38	4.76	4.45
150. Student teachers contribute in a positive way to their regular classrooms.	4.60	4.75	4.51	4.64	4.49	4.81	4.52

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1 = Disagree ..... 5 = Agree

Table 9 Your Understanding of Selected Topics Comparisons of Mean Responses Between Selected Groups	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
1. I understand something about standard English grammar							
2. I understand something about listening skills							
3. I understand something about speaking skills							
4. I understand something about informal writing							
5. I understand something about process writing		> **	< **				> **
6. I understand something about spelling							
7. I understand something about punctuation			< *				
8. I understand something about handwriting							
9. I understand something about integrating language arts			< **	< *			
10. I understand something about writing assessment			< **				> *
11. I understand something about methods of grouping		> *	< **				
12. I understand something about holistic assessment		> **	< **	< **			> **
13. I understand something about silent sustained reading			< **				
14. I understand something about phonics			< *				
15. I understand something about oral reading							
16. I understand something about comprehension strategies			< **				
17. I understand something about vocabulary strategies			< **				
18. I understand something about content area reading		> *	< **	< **			> *
19. I understand something about word identification							
20. I understand something about emergent literacy skills							

69 70

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

Table 10 Your Comfort with Selected Topics Comparisons of Mean Responses Between Selected Groups	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
21. I would feel adequate teaching standard English grammar			< **			> *	
22. I would feel adequate teaching listening skills			< **				> *
23. I would feel adequate teaching speaking skills		> *	< **				> **
24. I would feel adequate teaching informal writing			< **	< *			> **
25. I would feel adequate teaching process writing		> *	< **	< *			> **
26. I would feel adequate teaching spelling			< **			> *	
27. I would feel adequate teaching punctuation			< **				
28. I would feel adequate teaching handwriting				< *			> *
29. I would feel adequate teaching integrating language arts			< **				
30. I would feel adequate teaching writing assessment			< **			> *	> **
31. I would feel adequate teaching methods of grouping			< **			> *	> **
32. I would feel adequate teaching holistic assessment		> *	< **	< *			> **
33. I would feel adequate teaching silent sustained reading			< **			> *	> *
34. I would feel adequate teaching phonics			< **			> *	
35. I would feel adequate teaching oral reading			< **			> *	
36. I would feel adequate teaching comprehension strategies			< **			> **	> *
37. I would feel adequate teaching vocabulary strategies			< **			> *	
38. I would feel adequate teaching content area reading			< **	< **			> *
39. I would feel adequate teaching word identification			< **				
40. I would feel adequate teaching emergent literacy skills			< **				> **

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

Table 11 What makes a Masterful Teacher? Comparisons of Mean Responses Between Selected Groups	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
41. Masterful teachers develop special ways to listen to their students.			< *	< **			
42. Masterful teachers do not often think about their teaching.				> *			
43. A masterful teacher understands what factors motivate students to study.				< **			
44. Whether the principal thinks there is too much noise in his or her classroom would tend to worry a masterful teacher.							< *
45. Masterful teachers know that the process of understanding and improving one's teaching must start with reflection upon one's own experience.							> **
46. A masterful teacher continuously seeks new ways for students to learn subject matter.				< **	< *		
47. A masterful teacher thinks that increasing students' feelings of accomplishment is not important -- how much the student learns is what matters.				> *			
48. A masterful teacher is challenged to motivate students.				< *	> *	< *	
49. Masterful teachers want to help students to value learning.				< **			
50. Masterful teachers are not concerned that all students reach their maximum potential.							
51. Master teachers see each student as an individual, not as a mass, a group, or a class.			< *				
52. Peer coaching and collegial relationships detract from masterful teaching.				> **		> *	
53. Masterful teachers are concerned with learning style.		> **	< **				
54. Masterful teachers are prescriptive with student assignments.							
55. Masterful teachers are demanding, with high expectations based on individual ability.							
56. Masterful teachers are concerned with grade-level standards.							
57. Masterful teachers are authoritative in order to reach group objectives.							
58. Masterful teachers are not concerned with grade-level curriculum.				> *			
59. Masterful teachers are highly structured and lesson-plan oriented.							
60. A masterful teacher is not concerned with order and discipline.				> **		> **	

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

Table 12 What Makes an Exemplary School? Comparisons of Mean Responses Between Selected Groups	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
61. An exemplary school values each student as a member in a community of learners.		> *					
62. Curricula and departmental organization are unchanged in an exemplary school.		< *		> **		> **	
63. Exemplary schools rarely provide venues for new teacher development or the continuing professional development of veteran teachers.			> **	> **			
64. Classroom-oriented educational research should be conducted in exemplary schools.		> **			> *		
65. Principals in exemplary schools work hard to keep their staff alive and growing.		> *					
66. The culture of the exemplary school is "ready, fire, aim."							
67. Exemplary schools allow teachers time to reflect upon effective practice.		> *		< *			
68. Teachers in an exemplary school frequently raise questions about professional practice and often think about ways to change.	> **			< **			
69. An exemplary school's faculty rarely raise questions about the school's organization.		< **			< *		
70. A school becomes an exemplary school because it is able to establish a set instructional routine with a curriculum that is demanding and inflexible.		< *					< *
71. Exemplary schools have many non-instructional duties for teachers.		< **			< **		
72. In an exemplary school a teacher's job consists of transmitting basic information.		< *			< *		
73. The communication among teachers in an exemplary school is open and candid.		> *		< **			
74. Responsibilities of school faculty in an exemplary school include the development of new forms of school organization and new ways of scheduling the school day.	> **			< *			
75. Competition among exemplary school teachers is a step in developing collegiality.					< **		> *
76. In an exemplary school the business of teaching children is paramount.					> *		
77. Exemplary schools take the time to learn why some students progress slower.	> *			< *			
78. In an exemplary school diagnosing student learning problems is left to the experts.	< *						
79. In an exemplary school treating student learning disabilities is left to the experts.							
80. Part of the job of a teacher in an exemplary school is to guide students towards intellectual and emotional growth.				< **			

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

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Table 13 Your Thoughts About Teaching and Learning Comparisons of Mean Responses Between Selected Groups	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
81. Involving students in problem-solving better prepares them for today's workplace.	> *	> **			> *		
82. Students need more time in drill and practice learning basic skills and concepts.		> *			> *		
83. Creating stronger linkages between schools and the outside world helps students see connections between school work and the real world.							
84. Student learning that incorporates personal initiative and democratic problem solving are educational frills, not too useful in today's workplace.	< *	< **		> *			
85. Active student participation and directed discussion creates a classroom in which everyone learns from one another.		> *					
86. Children with special needs should be included in regular classrooms.							
87. Class morale and learning improve when students are involved in making decisions about activities in the classroom.							
88. Reflection and varied teaching methods are best suited for more advanced students.							
89. Teachers cannot adapt themselves to the different needs of all students.	< *			> **			
90. Team teaching provides a great support network.							
91. Cultural background is the major force that shapes learning.		< *					
92. Students should be able to apply what they learn.							
93. Poor instruction is primarily responsible for low student achievement.		< **					
94. Socialization is the most important aspect of the educational process.							
95. The classroom teacher is the primary influence on student learning.		< *					
96. The core body of content is the most important aspect of the educational process.		< *					
97. Cooperative learning activities meet the needs of individual youngsters.							
98. Class should be fun for students, even if some learning is sacrificed.							
99. Making decisions cooperatively helps build student confidence.				< *			
100. Teachers are storehouses of knowledge which they pass along to children.		< *					

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

Table 14 Your Thoughts About Things that Influence Teaching **Comparisons of Mean Responses Between Selected Groups**	**BPS vs. BRS**	**BPM vs. ERM**	**BPS vs. EPS**	**BRS vs. ERS**	**BPM vs. EPM**	**EPS vs. ERS**	**EPM vs. ERM**
101. Most teachers have too many students in their classes.	< **	< **					< *
102. Classroom teachers usually receive inadequate assistance from specialized teachers.				< *			< *
103. There is insufficient clerical help for teachers.						< *	
104. Teachers have more than enough time for class preparation and rest between classes.							> *
105. Teachers have too little control over the curriculum.							
106. It is essential that all schools be equal in their educational opportunities.							
107. Teachers are required to meet too many standards and regulations.		> *					
108. Instruction and testing designed and recommended by recognized experts should remain the central element of education reform.				> *	< *		
109. Teachers do not have sufficient time to think and plan.							
110. Teachers who reflect and raise questions about their practice can change schooling.							
111. The educational system will be invigorated only if democratic styles of management are adopted.					< *		> **
112. Teaching changes as a result of systematic inquiry about teaching and learning.						< *	
113. Recommendations of expert consultants are better suited for improving practice than school faculty recommendations.		< *			< *		
114. Research, as a process, is not well suited as a means to improve and refine the responsiveness of teachers to student differences.							
115. To improve instruction schools need to be reorganized to balance the individual work of a single teacher with the collaborative work of many teachers together.							
116. The instructional routine in most schools is too rigid.							
117. Student teachers can contribute to restructuring efforts.	> *	> *					> **
118. The curriculum in most schools is too inflexible.	< **						
119. Schools and universities should jointly assume responsibility for restructuring.	> *			< *			> *
120. In most schools testing and grading procedures need to be improved.		> *					

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

Table 15 Your Thoughts About Diversity Comparisons of Mean Responses Between Selected Groups	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
121. The primary responsibility for teachers in schools where inequalities of class, race, and gender are severe is the teaching of basic skills.		< *					< *
122. To be effective, a teacher must share a common culture and social outlook with his/her students.							
123. An important task of schools is to build bridges between traditional school culture, the culture of students, and culture of the community.				< **		< *	
124. Minority students come to school with cultural deficiencies.				> *	> *		
125. Society plays a significant role in creating & maintaining differences in achievement.						< *	
126. Teachers should look beyond diversity for basic similarities.							
127. Drawing upon student diversity in the teaching/learning process has little effect on student outcomes.		< **			< *		
128. Drawing upon students' diverse backgrounds is only a marginally effective vehicle for transmitting knowledge.							
129. It is counterproductive for school faculty to make diversity a central part of their professional discourse.							< *
130. The context of schooling, the work conditions facing teachers and the social context of the U.S. society are mainly responsible for creating and maintaining low achievement for diverse student learners.							
131. It is hard for most teachers to meet the needs of different kinds of students.			> *		> *	< *	
132. Teachers need to understand the psychological and cultural differences that underlie the diverse backgrounds of students in their classes.				< *		< *	

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

Table 16 Your Thoughts About New Teacher Preparation Comparisons of Mean Responses Between Selected Groups	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
133. Future educators need to observe children in day care centers, playgrounds, in homes and in other settings outside of school.				< **		< *	
134. The involvement of university faculty in actual school settings will help them teach prospective teachers more realistically.		> **		< **			
135. Student teachers should be evaluated using standardized testing.		< *					< *
136. University expertise and knowledge should control the teacher preparation program.							
137. Student teachers spend too much time in classrooms just sitting and observing.		> **		> *			
138. Teacher education has been as central to the mission of discipline-based secondary programs as to elementary programs.		< *		< *			
139. Student teachers should be evaluated using written projects, self-evaluations and personal reflections.							
140. Student teachers need to be allowed to reach into themselves to invent, enact and analyze tasks by which children learn.							
141. Student teachers should follow a prescribed set of classroom rules.							
142. Teachers who mentor new student teachers are the best in their profession.							
143. College faculty do not truly know about the life of school, the day-to-day realities.			< *				
144. Most student teachers are just non-paid servants for their mentor teachers.	< *	< **			< *		
145. There is little incentive for existing teachers to mentor new student teachers.							
146. Actual school teacher and administrator expertise and knowledge should control the teacher preparation program.							
147. Student teachers do not get to spend enough time in actual classrooms teaching.		> **	> **	> **			
148. Classroom teachers know little about how to properly mentor a new student teacher.							
149. Student teachers bring new and creative ideas to the classroom.				< *	< *		> **
150. Student teachers contribute in a positive way to their regular classrooms.					< *		> **

* indicates a significant difference at $p < .05$; ** indicates a significant difference at $p < .01$; < and > indicate the direction of difference

Table 17 Discriminant Analysis Summary by Survey Topic	BPS vs. BRS	BPM vs. ERM	BPS vs. EPS	BRS vs. ERS	BPM vs. EPM	EPS vs. ERS	EPM vs. ERM
Your Understanding of Selected Topics						***	***
Your Comfort with Selected Topics			***				***
What Makes a Masterful Teacher?							
What Makes an Exemplary School?		***					
Your Thoughts About Teaching and Learning		***					
Your Thoughts About Things that Influence Teaching		***					***
Your Thoughts About Diversity					***		
Your Thoughts About New Teacher Preparation		***	***	***			

*** indicates a significant ($p < .05$) discriminant function can be formed for the two groups

Illinois State University College of Education

Survey of Attitudes About Schooling and Teaching

Thank you for agreeing to complete this survey! The following questions ask for your opinions and attitudes towards many different aspects of schooling and teaching. There is no single correct answer; rather, each person will have their own thoughts and feelings. **Please take your time, reading each question fully and answering each question honestly.** Be sure to mark all of your answers on the optical scan form provided -- do not write on this survey booklet. If you do not wish to answer a question just leave it blank. Also do not write your name or any identifying number on the scan form since we want your answers to be completely anonymous. If you have any questions just ask one of the proctors. Thank you for your help!

Background Demographics

a. What is your gender?

Mark **0** in column "Codes A" if you are **Male**
Mark **1** in column "Codes A" if you are **Female**

b. What is your ethnicity?

Mark the appropriate number in column "Codes D":
1 = Alaskan / Native American
2 = Asian / Pacific Islander
3 = Black / African American
4 = Hispanic
5 = White Non-Hispanic
6 = Other

c. How many years old are you?

Mark your answer in columns "E" and "F"

d. If you are currently an ISU student,
how many credit hours have you completed?

Mark your answer in the three "Dept" columns

e. If you are currently an ISU students,
what is you major area / area of concentration?
(e.g. math, science, psychology, etc.
not elementary education)

Mark your answer in the columns for "Last Name"

f. If you are currently employed as a teacher,
how many years have you worked as a teacher?

Mark your answer in the first two columns of "Social Sec. No."

Your Understanding and Comfort with Selected Topics

Please tell us how much you currently understand, and how comfortable you think you would feel teaching, the following selected topics. Use the following scale:

1 = I understand **nothing** about ...
2 = I understand **very little** about ...
3 = I understand **something** about ...
4 = I understand **a lot** about ...
5 = I understand **everything** about ...

1 = I would feel **very uncomfortable** teaching ...
2 = I would feel **somewhat uncomfortable** teaching ...
3 = I would feel **adequate** teaching ...
4 = I would feel **somewhat comfortable** teaching ...
5 = I would feel **very comfortable** teaching ...

Complete the entire left hand column first, then go back and complete the right hand column.
Please pay close attention to where to place your responses on the optical scan form!

	I understand						**I would feel comfortable teaching ...**					
Ques #	**1**	**2**	**3**	**4**	**5**		**Ques #**	**1**	**2**	**3**	**4**	**5**
1	1	2	3	4	5	standard English grammar	21	1	2	3	4	5
2	1	2	3	4	5	listening skills	22	1	2	3	4	5
3	1	2	3	4	5	speaking skills	23	1	2	3	4	5
4	1	2	3	4	5	informal writing	24	1	2	3	4	5
5	1	2	3	4	5	process writing	25	1	2	3	4	5
6	1	2	3	4	5	spelling	26	1	2	3	4	5
7	1	2	3	4	5	punctuation	27	1	2	3	4	5
8	1	2	3	4	5	handwriting	28	1	2	3	4	5
9	1	2	3	4	5	integrating language arts	29	1	2	3	4	5
10	1	2	3	4	5	writing assessment	30	1	2	3	4	5
11	1	2	3	4	5	methods of grouping	31	1	2	3	4	5
12	1	2	3	4	5	holistic assessment	32	1	2	3	4	5
13	1	2	3	4	5	silent sustained reading	33	1	2	3	4	5
14	1	2	3	4	5	phonics	34	1	2	3	4	5
15	1	2	3	4	5	oral reading	35	1	2	3	4	5
16	1	2	3	4	5	comprehension strategies	36	1	2	3	4	5
17	1	2	3	4	5	vocabulary strategies	37	1	2	3	4	5
18	1	2	3	4	5	content area reading	38	1	2	3	4	5
19	1	2	3	4	5	word identification	39	1	2	3	4	5
20	1	2	3	4	5	emergent literacy skills	40	1	2	3	4	5

What makes a Masterful Teacher?

Each of the following statements describe a trait that a masterful teacher might have. For each statement mark your scan form on a scale from **1**, meaning that you **disagree** with the statement, to a **5**, meaning that you **agree** with the statement. Please pay close attention to where to place your responses on the optical scan form!

	Disagree				Agree
41. Masterful teachers develop special ways to listen to their students.	1	2	3	4	5
42. Masterful teachers do not often think about their teaching.	1	2	3	4	5
43. A masterful teacher understands what factors motivate students to study.	1	2	3	4	5
44. Whether the principal thinks there is too much noise in his or her classroom would tend to worry a masterful teacher.	1	2	3	4	5
45. Masterful teachers know that the process of understanding and improving one's teaching must start with reflection upon one's own experience.	1	2	3	4	5
46. A masterful teacher continuously seeks new ways for students to learn subject matter.	1	2	3	4	5
47. A masterful teacher thinks that increasing students' feelings of accomplishment is not important -- how much the student learns is what matters.	1	2	3	4	5
48. A masterful teacher is challenged to motivate students.	1	2	3	4	5
49. Masterful teachers want to help students to value learning.	1	2	3	4	5
50. Masterful teachers are not concerned that all students reach their maximum potential.	1	2	3	4	5
51. Master teachers see each student as an individual, not as a mass, a group, or a class.	1	2	3	4	5
52. Peer coaching and collegial relationships detract from masterful teaching.	1	2	3	4	5
53. Masterful teachers are concerned with learning style.	1	2	3	4	5
54. Masterful teachers are prescriptive with student assignments.	1	2	3	4	5
55. Masterful teachers are demanding, with high expectations based on individual ability.	1	2	3	4	5
56. Masterful teachers are concerned with grade-level standards.	1	2	3	4	5
57. Masterful teachers are authoritative in order to reach group objectives.	1	2	3	4	5
58. Masterful teachers are not concerned with grade-level curriculum.	1	2	3	4	5
59. Masterful teachers are highly structured and lesson-plan oriented.	1	2	3	4	5
60. A masterful teacher is not concerned with order and discipline.	1	2	3	4	5

What Makes an Exemplary School?

Each of the following statements describe a trait that an exemplary school might have. For each statement mark your scan form on a scale from **1**, meaning that you **disagree** with the statement, to a **5**, meaning that you **agree** with the statement. Please pay close attention to where to place your responses on the optical scan form!

	Disagree				Agree
61. An exemplary school values each student as a member in a community of learners.	1	2	3	4	5
62. Curricula and departmental organization are unchanged in an exemplary school.	1	2	3	4	5
63. Exemplary schools rarely provide venues for new teacher development or the continuing professional development of veteran teachers.	1	2	3	4	5
64. Classroom-oriented educational research should be conducted in exemplary schools.	1	2	3	4	5
65. Principals in exemplary schools work hard to keep their staff alive and growing.	1	2	3	4	5
66. The culture of the exemplary school is "ready, fire, aim."	1	2	3	4	5
67. Exemplary schools allow teachers time to reflect upon effective practice.	1	2	3	4	5
68. Teachers in an exemplary school frequently raise questions about professional practice and often think about ways to change.	1	2	3	4	5
69. An exemplary school's faculty rarely raise questions about the school's organization.	1	2	3	4	5
70. A school becomes an exemplary school because it is able to establish a set instructional routine with a curriculum that is demanding and inflexible.	1	2	3	4	5
71. Exemplary schools have many non-Instructional duties for teachers.	1	2	3	4	5
72. In an exemplary school a teacher's job consists of transmitting basic information.	1	2	3	4	5
73. The communication among teachers in an exemplary school is open and candid.	1	2	3	4	5
74. Responsibilities of school faculty in an exemplary school include the development of new forms of school organization and new ways of scheduling the school day.	1	2	3	4	5
75. Competition among exemplary school teachers is a step in developing collegiality.	1	2	3	4	5
76. In an exemplary school the business of teaching children is paramount.	1	2	3	4	5
77. Exemplary schools take the time to learn why some students progress slower.	1	2	3	4	5
78. In an exemplary school diagnosing student learning problems is left to the experts.	1	2	3	4	5
79. In an exemplary school treating student learning disabilities is left to the experts.	1	2	3	4	5
80. Part of the job of a teacher in an exemplary school is to guide students towards intellectual and emotional growth.	1	2	3	4	5

Your Thoughts About Teaching and Learning

Each of the following statements describe a position about teaching and learning. For each statement mark your scan form on a scale from 1, meaning that you **disagree** with the statement, to a 5, meaning that you **agree** with the statement. Please pay close attention to where to place your responses on the optical scan form!

		Disagree				Agree
81.	Involving students in problem-solving better prepares them for today's workplace.	1	2	3	4	5
82.	Students need more time in drill and practice learning basic skills and concepts.	1	2	3	4	5
83.	Creating stronger linkages between schools and the outside world helps students see connections between school work and the real world.	1	2	3	4	5
84.	Student learning that incorporates personal initiative and democratic problem solving are educational frills, not too useful in today's workplace.	1	2	3	4	5
85.	Active student participation and directed discussion creates a classroom in which everyone learns from one another.	1	2	3	4	5
86.	Children with special needs should be included in regular classrooms.	1	2	3	4	5
87.	Class morale and learning improve when students are involved in making decisions about activities in the classroom.	1	2	3	4	5
88.	Reflection and varied teaching methods are best suited for more advanced students.	1	2	3	4	5
89.	Teachers cannot adapt themselves to the different needs of all students.	1	2	3	4	5
90.	Team teaching provides a great support network.	1	2	3	4	5
91.	Cultural background is the major force that shapes learning.	1	2	3	4	5
92.	Students should be able to apply what they learn.	1	2	3	4	5
93.	Poor instruction is primarily responsible for low student achievement.	1	2	3	4	5
94.	Socialization is the most important aspect of the educational process.	1	2	3	4	5
95.	The classroom teacher is the primary influence on student learning.	1	2	3	4	5
96.	The core body of content is the most important aspect of the educational process.	1	2	3	4	5
97.	Cooperative learning activities meet the needs of individual youngsters.	1	2	3	4	5
98.	Class should be fun for students, even if some learning is sacrificed.	1	2	3	4	5
99.	Making decisions cooperatively helps build student confidence.	1	2	3	4	5
100.	Teachers are storehouses of knowledge which they pass along to children.	1	2	3	4	5

Your Thoughts About Things that Influence Teaching

Each of the following statements describe a position about things that influence teaching. For each statement mark your scan form on a scale from **1**, meaning that you **disagree** with the statement, to a **5**, meaning that you **agree** with the statement. Please pay close attention to where to place your responses on the optical scan form!

	Disagree				Agree
101. Most teachers have too many students in their classes.	1	2	3	4	5
102. Classroom teachers usually receive inadequate assistance from specialized teachers.	1	2	3	4	5
103. There is insufficient clerical help for teachers.	1	2	3	4	5
104. Teachers have more than enough time for class preparation and rest between classes.	1	2	3	4	5
105. Teachers have too little control over the curriculum.	1	2	3	4	5
106. It is essential that all schools be equal in their educational opportunities.	1	2	3	4	5
107. Teachers are required to meet too many standards and regulations.	1	2	3	4	5
108. Instruction and testing designed and recommended by recognized experts should remain the central element of education reform.	1	2	3	4	5
109. Teachers do not have sufficient time to think and plan.	1	2	3	4	5
110. Teachers who reflect and raise questions about their practice can change schooling.	1	2	3	4	5
111. The educational system will be invigorated only if democratic styles of management are adopted.	1	2	3	4	5
112. Teaching changes as a result of systematic inquiry about teaching and learning.	1	2	3	4	5
113. Recommendations of expert consultants are better suited for improving practice than school faculty recommendations.	1	2	3	4	5
114. Research, as a process, is not well suited as a means to improve and refine the responsiveness of teachers to student differences.	1	2	3	4	5
115. To improve instruction schools need to be reorganized to balance the individual work of a single teacher with the collaborative work of many teachers together.	1	2	3	4	5
116. The instructional routine in most schools is too rigid.	1	2	3	4	5
117. Student teachers can contribute to restructuring efforts.	1	2	3	4	5
118. The curriculum in most schools is too inflexible.	1	2	3	4	5
119. Schools and universities should jointly assume responsibility for restructuring.	1	2	3	4	5
120. In most schools testing and grading procedures need to be improved.	1	2	3	4	5

Your Thoughts About Diversity

Each of the following statements describe a position about diversity. For each statement mark your scan form on a scale from **1**, meaning that you **disagree** with the statement, to a **5**, meaning that you **agree** with the statement. Please pay close attention to where to place your responses on the optical scan form!

	Disagree				Agree
121. The primary responsibility for teachers in schools where inequalities of class, race, and gender are severe is the teaching of basic skills.	1	2	3	4	5
122. To be effective, a teacher must share a common culture and social outlook with his/her students.	1	2	3	4	5
123. An important task of schools is to build bridges between traditional school culture, the culture of students, and culture of the community.	1	2	3	4	5
124. Minority students come to school with cultural deficiencies.	1	2	3	4	5
125. Society plays a significant role in creating & maintaining differences in achievement.	1	2	3	4	5
126. Teachers should look beyond diversity for basic similarities.	1	2	3	4	5
127. Drawing upon student diversity in the teaching/learning process has little effect on student outcomes.	1	2	3	4	5
128. Drawing upon students' diverse backgrounds is only a marginally effective vehicle for transmitting knowledge.	1	2	3	4	5
129. It is counterproductive for school faculty to make diversity a central part of their professional discourse.	1	2	3	4	5
130. The context of schooling, the work conditions facing teachers and the social context of the U.S. society are mainly responsible for creating and maintaining low achievement for diverse student learners.	1	2	3	4	5
131. It is hard for most teachers to meet the needs of different kinds of students.	1	2	3	4	5
132. Teachers need to understand the psychological and cultural differences that underlie the diverse backgrounds of students in their classes.	1	2	3	4	5

Your Thoughts About New Teacher Preparation

Each of the following statements describe a position about new teacher preparation. For each statement mark your scan form on a scale from **1**, meaning that you **disagree** with the statement, to a **5**, meaning that you **agree** with the statement. Please pay close attention to where to place your responses on the optical scan form!

		Disagree				Agree
133	Future educators need to observe children in day care centers, playgrounds, in homes and in other settings outside of school.	1	2	3	4	5
134.	The involvement of university faculty in actual school settings will help them teach prospective teachers more realistically.	1	2	3	4	5
135.	Student teachers should be evaluated using standardized testing.	1	2	3	4	5
136.	University expertise and knowledge should control the teacher preparation program.	1	2	3	4	5
137.	Student teachers spend too much time in classrooms just sitting and observing.	1	2	3	4	5
138.	Teacher education has been as central to the mission of discipline based secondary programs as to elementary programs.	1	2	3	4	5
139.	Student teachers should be evaluated using written projects, self-evaluations and personal reflections.	1	2	3	4	5
140.	Student teachers need to be allowed to reach into themselves to invent, enact and analyze tasks by which children learn.	1	2	3	4	5
141.	Student teachers should follow a prescribed set of classroom rules.	1	2	3	4	5
142.	Teachers who mentor new student teachers are the best in their profession.	1	2	3	4	5
143.	College faculty do not truly know about the life of school, the day-to-day realities.	1	2	3	4	5
144.	Most student teachers are just non-paid servants for their mentor teachers.	1	2	3	4	5
145.	There is little incentive for existing teachers to mentor new student teachers.	1	2	3	4	5
146.	Actual school teacher and administrator expertise and knowledge should control the teacher preparation program.	1	2	3	4	5
147.	Student teachers do not get to spend enough time in actual classrooms teaching.	1	2	3	4	5
148.	Classroom teachers know little about how to properly mentor a new student teacher.	1	2	3	4	5
149.	Student teachers bring new and creative ideas to the classroom.	1	2	3	4	5
150.	Student teachers contribute in a positive way to their regular classrooms.	1	2	3	4	5

Faculty Interview Questions

1. Please introduce yourself and give your job title.
2. Describe your role in the PDS project from its inception through the end of the Fall, 1995 semester.
3. Describe the activities you engage in during a typical day (week) for the ISU-Wheeling PDS project:
   a. Nature and duration of contact(s).
   b. Relevance of the contact(s) to PDS project, future planning, etc.
   c. What courses did you teach (describe course content & student activities)
4. Why did you (ISU) decide to get involved with the a PDS project?
   a. Why in Wheeling?
5. The term "PDS" is used to describe many different things. In your own opinion, using what you are accomplishing at Wheeling as a model, please:
   a. Describe a "PDS" in general.
   b. Tell how it should benefit the ISU students.
   c. What should ISU, as an institution, and ISU faculty gain from it?
   d. How do the teachers and administrators at Wheeling benefit?
   e. How do the students at Wheeling benefit?
   f. What are the other benefits, real or potential, from this effort?
   g. What are the possible drawbacks?
6. How is all of what you have described above (Q #5) different from what is regularly done to help create new teachers?
7. In your opinion, what are the goals of the ISU-Wheeling PDS project:
   a. For the ISU students?
   b. For ISU (as an institution) and for the participating ISU faculty?
   c. For the Wheeling teachers and administrators?
   d. For the Wheeling students?
   e. For anyone else?
8. As of the first semester, how well have these goals been met (for each group)?
9. Please tell us how much, and why, you like or dislike the following aspects of the PDS project:
   a. Travel.
   b. Workload.
   c. Teaching assignment and schedule.
   d. Cohort group (ISU students).
   e. Wheeling facilities and resources/
   f. Communication with the ISU students.
   g. Communication with Wheeling contact (teachers).
   h. Phases (ISU student scheduling).
   i. Monetary cost.
   j. Time & energy cost.
   k. The ISU students.
   l. The Wheeling teachers & administrators.
10. Please describe the opportunities you have had, through the PDS project, for:
    a. Research.
    b. Teaching.
    c. Service.
11. How would you recommend improving a PDS in future years?
12. What is your role in the PDS during the Spring 1996 semester?
13. Is there anything else that you would like to add?

THANK YOU!